

=&gt; b reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

27.63

647.87

FILE 'REGISTRY' ENTERED AT 11:40:15 ON 29 JAN 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 28 JAN 2004 HIGHEST RN 642928-00-5

DICTIONARY FILE UPDATES: 28 JAN 2004 HIGHEST RN 642928-00-5

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

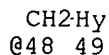
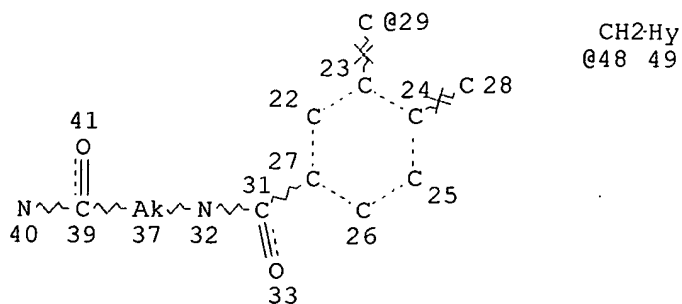
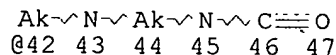
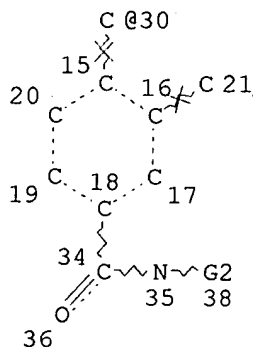
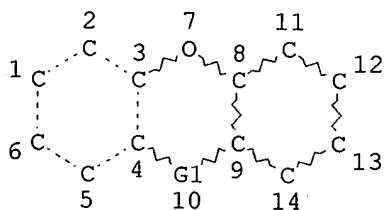
Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=&gt; d que stat 133

L28 STR



VAR G1=29/30  
 VAR G2=42/48  
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 GGCAT IS LIN AT 37  
 DEFAULT ECLEVEL IS LIMITED

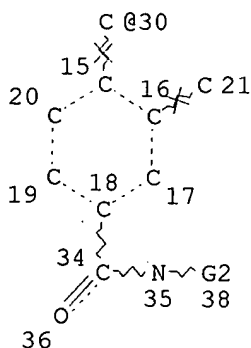
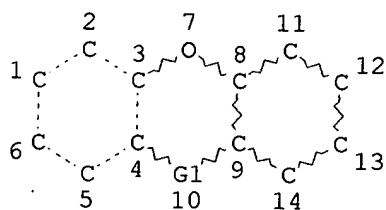
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 NUMBER OF NODES IS 49

STEREO ATTRIBUTES: NONE

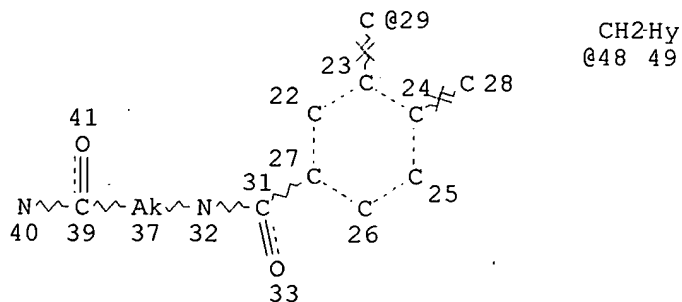
L30 183 SEA FILE=REGISTRY SSS FUL L28  
 L31 22 SEA FILE=REGISTRY ABB=ON PLU=ON OC4/ES AND NCNC3/ES AND L30  
 L32 6 SEA FILE=REGISTRY ABB=ON PLU=ON OC4/ES AND NC4-NCNC3/ES AND L30  
 L33 28 SEA FILE=REGISTRY ABB=ON PLU=ON L31 OR L32

=> d que stat 134

L28 STR



Ak~N~Ak~N~C≡O  
 @42 43 44 45 46 47



CH2Hy  
 @48 49

VAR G1=29/30  
 VAR G2=42/48  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS LIN AT 37  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 49

STEREO ATTRIBUTES: NONE

L30 183 SEA FILE=REGISTRY SSS FUL L28  
L31 22 SEA FILE=REGISTRY ABB=ON PLU=ON OC4/ES AND NCNC3/ES AND L30  
L32 6 SEA FILE=REGISTRY ABB=ON PLU=ON OC4/ES AND NC4-NCNC3/ES AND  
L30  
L33 28 SEA FILE=REGISTRY ABB=ON PLU=ON L31 OR L32  
L34 155 SEA FILE=REGISTRY ABB=ON PLU=ON L30 NOT L33

=> b hcaplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.84	648.71

FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 11:41:15 ON 29 JAN 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
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FILE COVERS 1907 - 29 Jan 2004 VOL 140 ISS 5  
FILE LAST UPDATED: 28 Jan 2004 (20040128/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'HCAPLUS' FILE

=> d que nos 139

L28 STR  
L30 183 SEA FILE=REGISTRY SSS FUL L28  
L31 22 SEA FILE=REGISTRY ABB=ON PLU=ON OC4/ES AND NCNC3/ES AND L30  
L32 6 SEA FILE=REGISTRY ABB=ON PLU=ON OC4/ES AND NC4-NCNC3/ES AND  
L30  
L33 28 SEA FILE=REGISTRY ABB=ON PLU=ON L31 OR L32  
L34 155 SEA FILE=REGISTRY ABB=ON PLU=ON L30 NOT L33  
L35 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L33  
L36 85 SEA FILE=HCAPLUS ABB=ON PLU=ON L34  
L37 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L36 AND NUCLEO?/OBI  
L39 20 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 OR L37

=> d ibib hitind hitstr 139 1-20

L39 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:874884 HCAPLUS  
 DOCUMENT NUMBER: 139:359850  
 TITLE: Multiplex analysis of nucleic acid sequences by primer extension with incorporation of labile reporter moieties and capture groups  
 INVENTOR(S): Matray, Tracy J.; Singh, Sharat S.; Macevicz, Stephen C.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 66 pp., Cont.-in-part of U.S. Ser. No. 154,042.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 16  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003207300	A1	20031106	US 2003-338729	20030107
US 6682887	B1	20040127	US 2000-561579	20000428
US 6514700	B1	20030204	US 2000-602586	20000621
US 6627400	B1	20030930	US 2000-698846	20001027
US 2003013126	A1	20030116	US 2002-154042	20020521

PRIORITY APPLN. INFO.:  
 US 2000-561579 B2 20000428  
 US 2000-602586 A2 20000621  
 US 2000-698846 A2 20001027  
 US 2002-154042 A2 20020521  
 US 1999-303029 A2 19990430  
 US 2001-292548P P 20010521  
 US 2001-334901P P 20011024

OTHER SOURCE(S): MARPAT 139:359850  
 IC ICM C12Q001-68  
 ICS C12P019-34  
 NCL 435006000; 435091200  
 CC 3-1 (Biochemical Genetics)  
 IT **Nucleoside** triphosphates  
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
 (analog, as labels or affinity groups; multiplex anal. of nucleic acid sequences by primer extension with incorporation of labile reporter moieties and capture groups)  
 IT 123761-26-2P 331834-87-8P 476349-14-1P 476349-15-2P 476360-19-7P  
**476360-20-0P 476360-21-1P 476360-22-2P**  
 RL: ARU (Analytical role, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reactions and anal. use; multiplex anal. of nucleic acid sequences by primer extension with incorporation of labile reporter moieties and capture groups)  
 IT 620647-58-7 620647-59-8  
 RL: PRP (Properties)  
 (unclaimed **nucleotide** sequence; multiplex anal. of nucleic acid sequences by primer extension with incorporation of labile reporter moieties and capture groups)  
 IT **476360-20-0P 476360-21-1P**  
 RL: ARU (Analytical role, unclassified); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant

or reagent)

(preparation and reactions and anal. use; multiplex anal. of nucleic acid sequences by primer extension with incorporation of labile reporter moieties and capture groups)

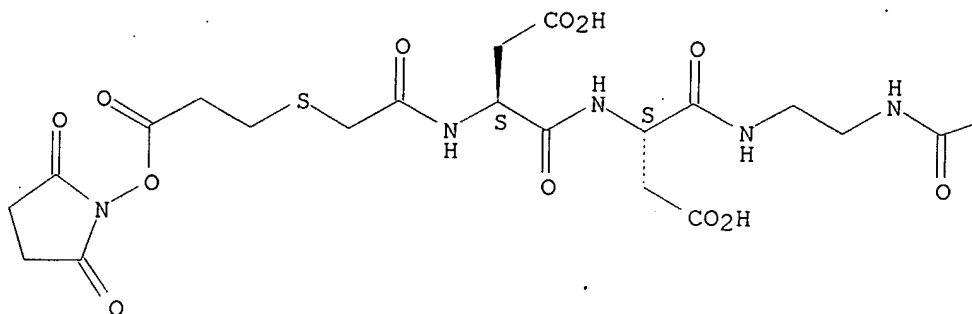
RN 476360-20-0 HCAPLUS

CN L- $\alpha$ -Asparagine, N-[[[3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl]thio]acetyl]-L- $\alpha$ -aspartyl-N-[2-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]ethyl]- (9CI) (CA INDEX NAME)

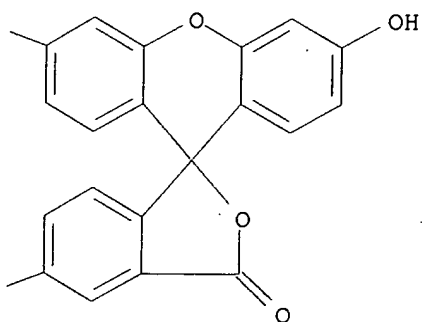
Absolute stereochemistry.

PAGE 1-A

HO—



PAGE 1-B

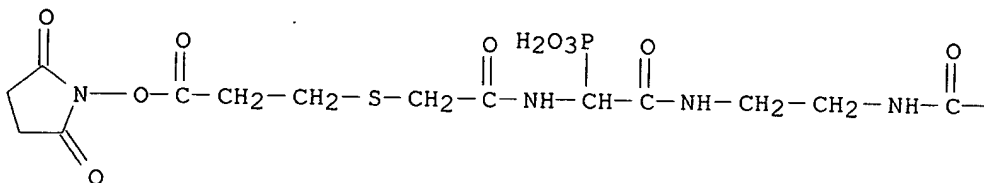


RN 476360-21-1 HCAPLUS

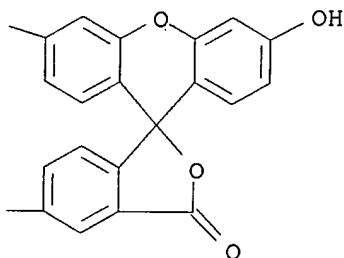
CN Phosphonic acid, [2-[[2-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]ethyl]amino]-1-[[[3-[(2,5-dioxo-1-pyrrolidinyl)oxy]-3-oxopropyl]thio]acetyl]amino]-2-oxoethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

HO—



PAGE 1-B



L39 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:757199 HCAPLUS

DOCUMENT NUMBER: 139:256248

TITLE: Heterocyclic nucleoside derivatives for labeling of nucleic acids

INVENTOR(S): McGall, Glenn; Barone, Anthony D.

PATENT ASSIGNEE(S): Affymetrix, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 74 pp., Cont.-in-part of U.S. Ser. No. 882,649.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003180757	A1	20030925	US 2002-314012	20021205
WO 9727317	A1	19970731	WO 1997-US1603	19970122
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				

Searched by P. Ruppel

US 6344316	B1	20020205	US 1997-882649	19970625
US 2001018514	A1	20010830	US 1998-126645	19980731
US 2001044531	A1	20011122	US 2001-780574	20010209
US 6596856	B2	20030722		
US 2002165372	A1	20021107	US 2001-952387	20010911
US 2002182625	A1	20021205	US 2002-97113	20020312
PRIORITY APPLN. INFO.:			US 1996-10471P	P 19960123
			US 1997-35170P	P 19970109
			WO 1997-US1603	A1 19970122
			US 1997-882649	A2 19970625
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			US 2001-952387	A2 20010911
			US 2002-97113	A2 20020312
			US 2000-231827P	P 20000911
			US 2001-275202P	P 20010312

OTHER SOURCE(S): MARPAT 139:256248

IC ICM C12Q001-68

ICS G01N033-53; C07H019-04; C07H017-02; C07D417-02; C07D235-02

NCL 435006000; 435007500; 536026600; 548303700; 536017400

CC 3-1 (Biochemical Genetics)

Section cross-reference(s): 7, 9, 33

IT 474378-45-5P

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST  
(Analytical study); PREP (Preparation); USES (Uses)  
(preparation and use of; heterocyclic nucleoside derivs. for labeling of  
nucleic acids)

IT 474378-45-5P

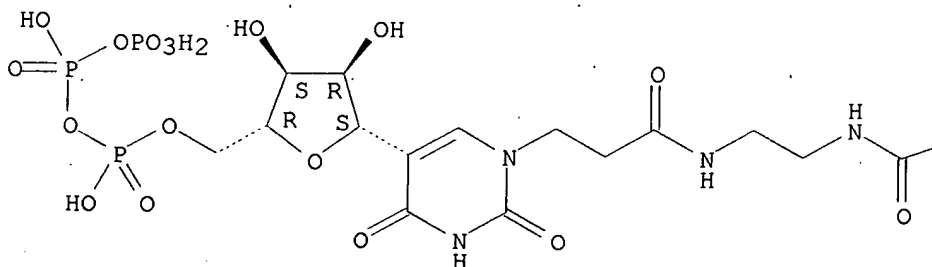
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST  
(Analytical study); PREP (Preparation); USES (Uses)  
(preparation and use of; heterocyclic nucleoside derivs. for labeling of  
nucleic acids)

RN 474378-45-5 HCAPLUS

CN 1(2H)-Pyrimidinepropanamide, N-[2-[[[6-[[[3',6'-dihydroxy-3-  
oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-  
oxohexyl]amino]ethyl]-3,4-dihydro-5-[5-O-[hydroxy[[hydroxy(phosphonooxy)ph  
osphinyl]oxy]phosphinyl]-β-D-ribofuranosyl]-2,4-dioxo- (9CI) (CA  
INDEX NAME)

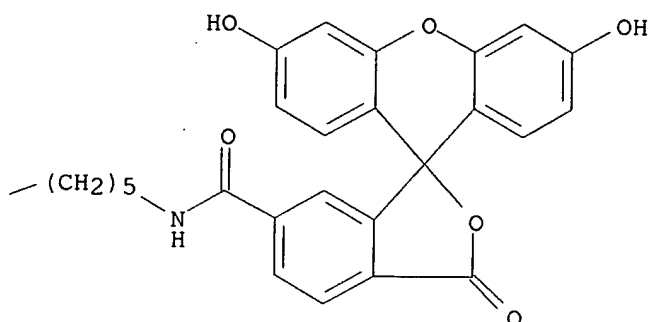
Absolute stereochemistry.

PAGE 1-A



Searched by P. Ruppel

PAGE 1-B



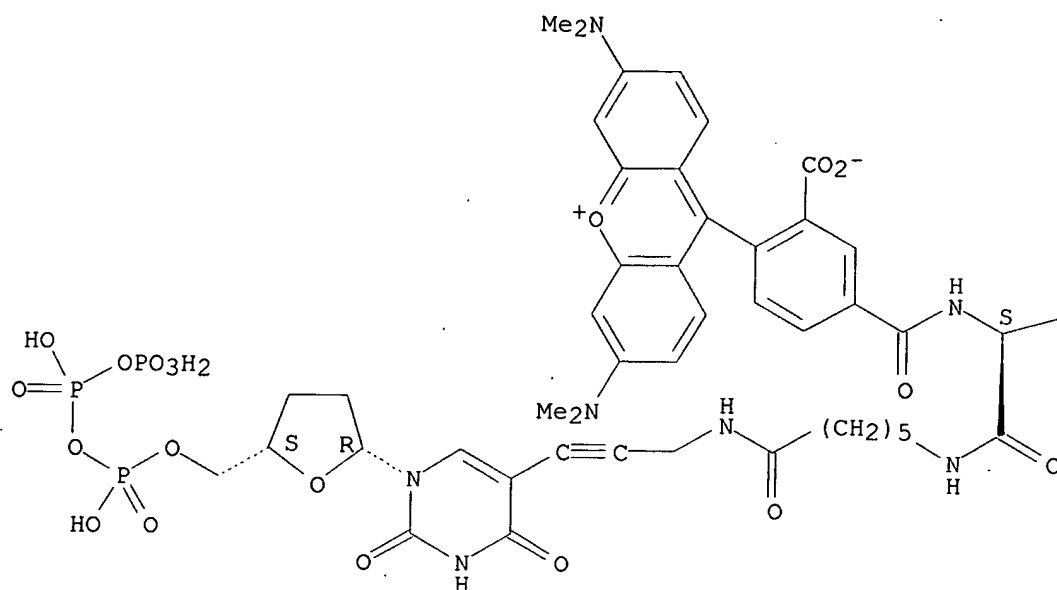
L39 ANSWER 3 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:714438 HCAPLUS  
 DOCUMENT NUMBER: 139:391807  
 TITLE: Synthesis of Novel Tyrosinyl FRET Cassettes, Terminators, and Their Potential Use in DNA Sequencing  
 AUTHOR(S): Sudhakar Rao, T.; Zhang, Weihong; Xiao, Haiguang; Flick, Parke; Kumar, Shiv; Nampalli, Satyam  
 CORPORATE SOURCE: Amersham Biosciences, Piscataway, NJ, 08855-1327, USA  
 SOURCE: Nucleosides, Nucleotides & Nucleic Acids (2003), 22(5-8), 1443-1445  
 CODEN: NNNAFY; ISSN: 1525-7770  
 PUBLISHER: Marcel Dekker, Inc.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 CC 3-1 (Biochemical Genetics)  
 Section cross-reference(s): 41  
 IT **625380-76-9P** 625380-77-0P 625380-78-1P  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of novel tyrosine- and benzofuran-linked FRET cassettes and terminators for use in DNA sequencing)  
 IT **625380-76-9P**  
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (synthesis of novel tyrosine- and benzofuran-linked FRET cassettes and terminators for use in DNA sequencing)  
 RN 625380-76-9 HCAPLUS  
 CN Xanthylum, 9-[2-carboxy-4-[[[(1S)-1-[[2-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]methyl]-5-benzofuranyl]methyl]-2-oxo-2-[[6-oxo-6-[[3-[1,2,3,4-tetrahydro-2,4-dioxo-1-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphasphahept-1-yl)-2-furanyl]-5-pyrimidinyl]-2-propynyl]amino]hexyl]amino]ethyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

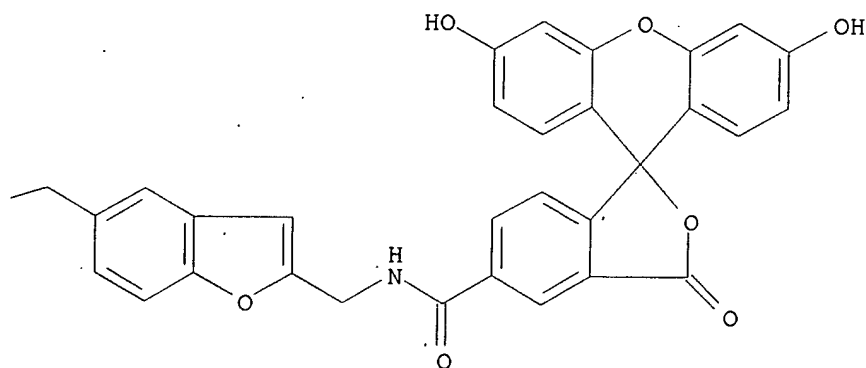
Searched by P. Ruppel



PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

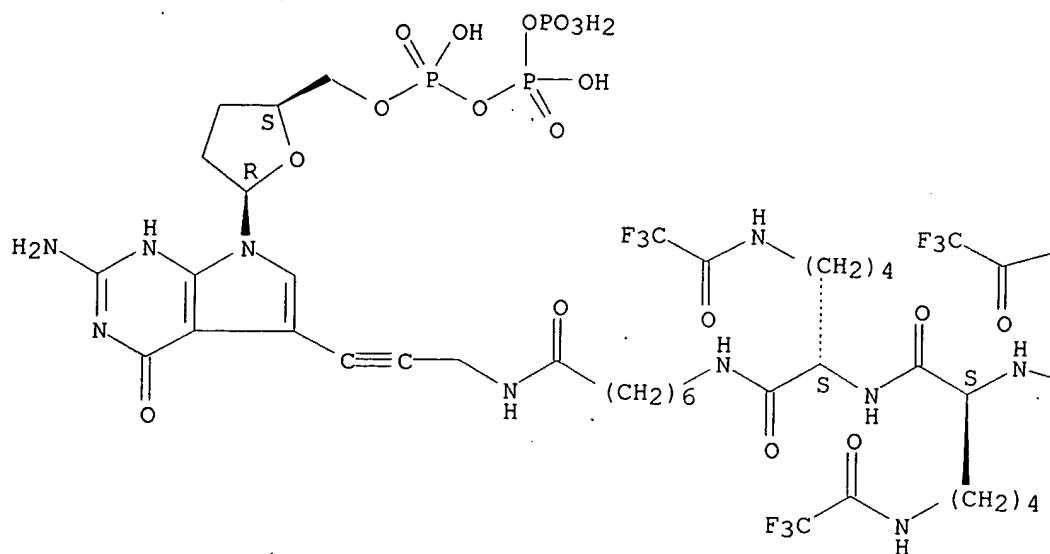
L39 ANSWER 4 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2003:616857 HCAPLUS  
DOCUMENT NUMBER: 139:286905  
TITLE: Efficient incorporation of positively charged 2',  
3'-dideoxynucleoside-5'-triphosphates by DNA  
polymerases and their application in direct-load' DNA  
sequencing

Searched by P. Ruppel

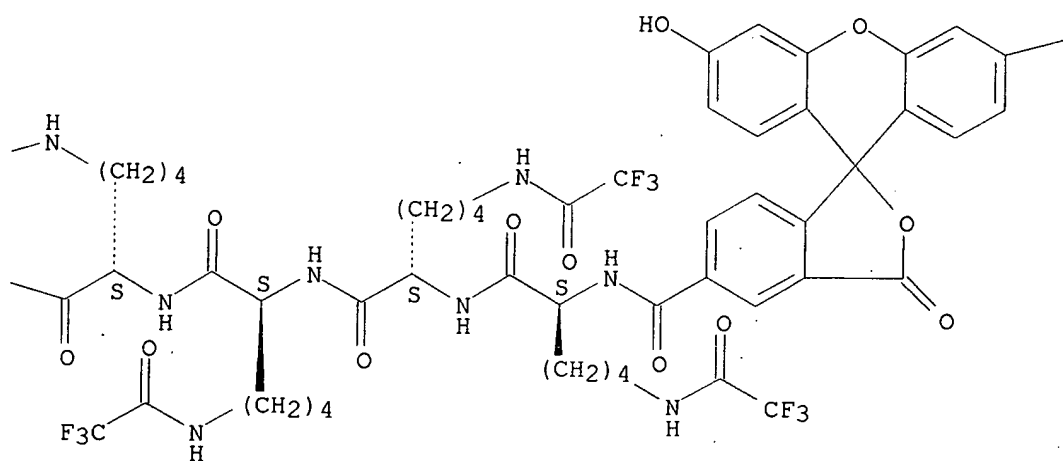
AUTHOR(S): Finn, Patrick J.; Bull, Matthew G.; Xiao, Haiguang;  
Phillips, Paula D.; Nelson, John R.; Grossmann, Greg;  
Nampalli, Satyam; McArdle, Bernard F.; Mamone, J.  
CORPORATE SOURCE: Anthony; Flick, Parke K.; Fuller, Carl W.; Kumar, Shiv  
SOURCE: Amersham Biosciences, Piscataway, NJ, 08855-1327, USA  
Nucleic Acids Research (2003), 31(16), 4769-4778  
CODEN: NARHAD; ISSN: 0305-1048  
PUBLISHER: Oxford University Press  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
CC 3-1 (Biochemical Genetics)  
IT 608520-65-6P 608520-66-7P 608520-67-8P  
608520-68-9P 608520-69-0P 608520-72-5P  
608520-73-6P 608520-78-1P 608520-79-2P 608520-80-5P  
608520-81-6P 608520-86-1P 608520-87-2P  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST  
(Analytical study); PREP (Preparation); USES (Uses)  
(efficient incorporation of pos. charged 2', 3'-dideoxynucleoside-5'-  
triphosphates by DNA polymerases and their application in direct-load'  
DNA sequencing)  
IT 608520-65-6P 608520-66-7P 608520-67-8P  
608520-68-9P 608520-69-0P 608520-72-5P  
608520-73-6P  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST  
(Analytical study); PREP (Preparation); USES (Uses)  
(efficient incorporation of pos. charged 2', 3'-dideoxynucleoside-5'-  
triphosphates by DNA polymerases and their application in direct-load'  
DNA sequencing)  
RN 608520-65-6 HCAPLUS  
CN L-Lysinamide, N2-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-  
[9H]xanthen]-5-yl)carbonyl]-N6-(trifluoroacetyl)-L-lysyl-N6-  
(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-  
(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N-[7-[[3-[2-amino-  
4,7-dihydro-4-oxo-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-  
trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-1H-pyrrolo[2,3-  
d]pyrimidin-5-yl]-2-propynyl]amino]-7-oxoheptyl]-N6-(trifluoroacetyl)-  
(9CI) . (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C

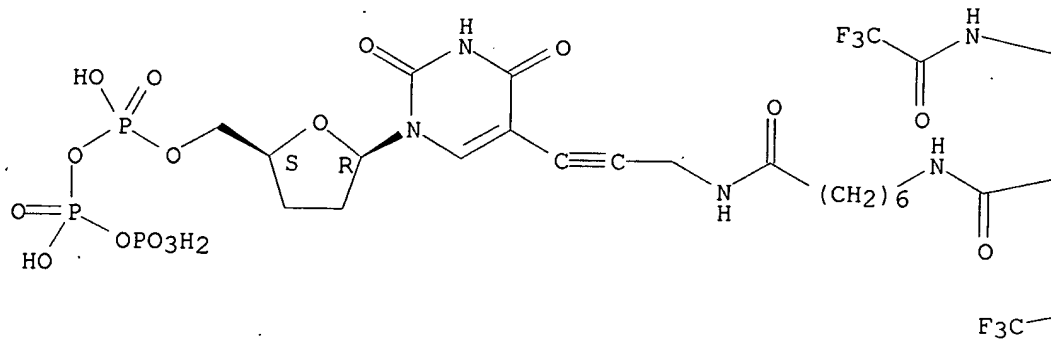
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RN 608520-66-7 HCAPLUS

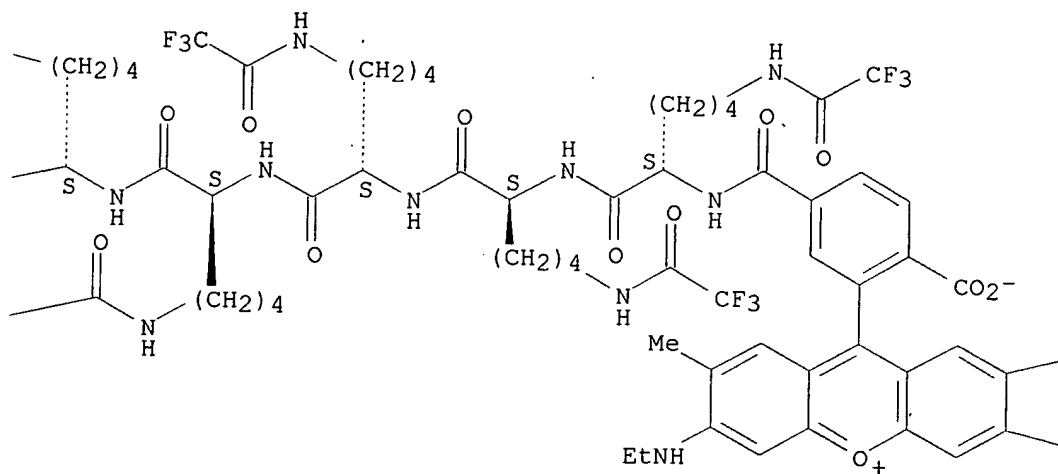
CN L-Lysine, N2-[3-[3,6-bis(ethylamino)-2,7-dimethylxanthylum-9-yl]-4-carboxybenzoyl]-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-, inner salt, 5-amide with 5-[3-[(7-amino-1-oxoheptyl)amino]-1-propynyl]-2',3'-dideoxyuridine 5'-(tetrahydrogen triphosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PAGE 1-C

— Me

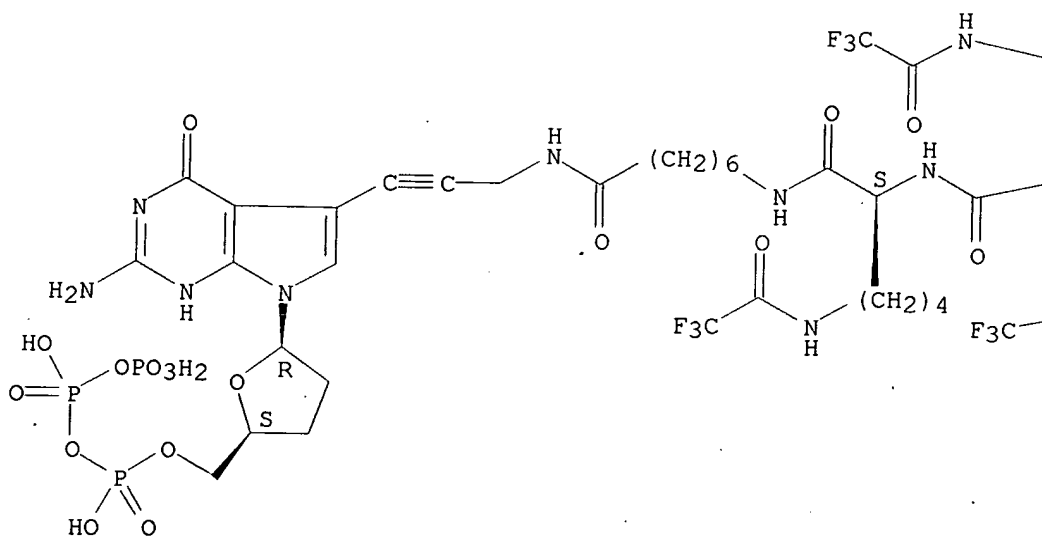
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RN 608520-67-8 HCAPLUS

CN L-Lysinamide, N2-[3-carboxy-4-(3,6-diaminoxanthylum-9-yl)benzoyl]-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N-[7-[[3-[2-amino-4,7-dihydro-4-oxo-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-1H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propynyl]amino]-7-oxoheptyl]-N6-(trifluoroacetyl)-, inner salt (9CI) (CA INDEX NAME)

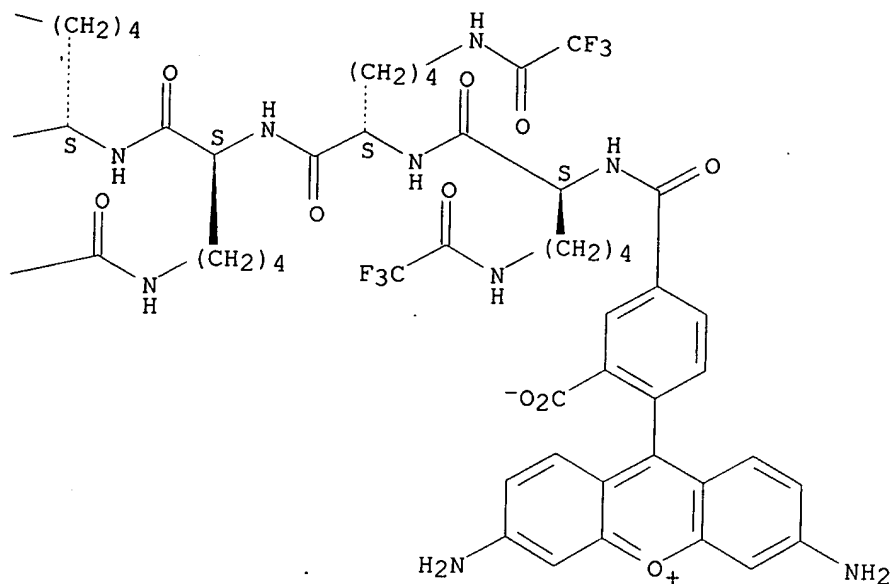
Absolute stereochemistry.

PAGE 1-A



Searched by P. Ruppel

PAGE 1-B

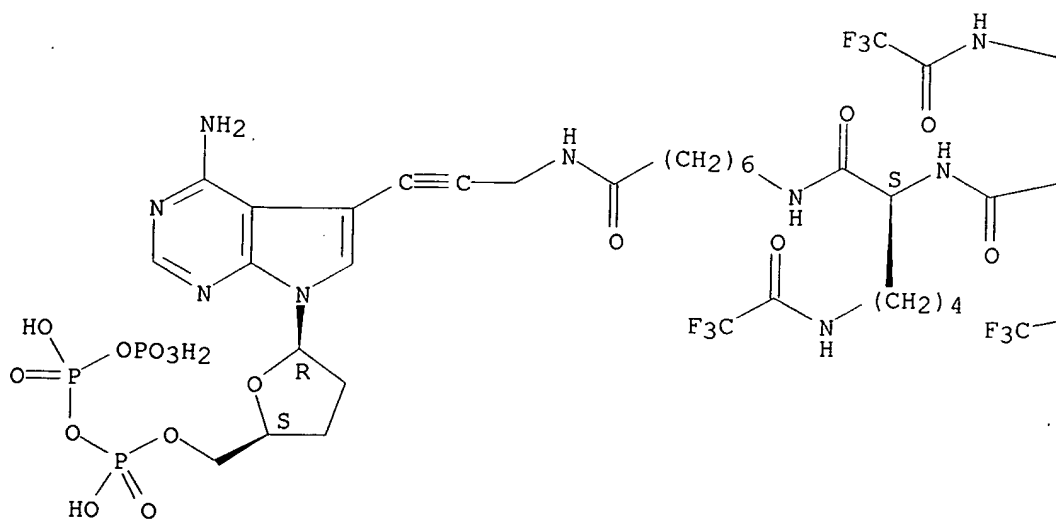


RN 608520-68-9 HCAPLUS

CN L-Lysinamide, N2-[4-[3,6-bis(dimethylamino)-2,7-dimethylxanthylum-9-yl]-3-carboxybenzoyl]-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N-[7-[[3-[4-amino-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propynyl]amino]-7-oxoheptyl]-N6-(trifluoroacetyl)-, inner salt (9CI)  
(CA INDEX NAME)

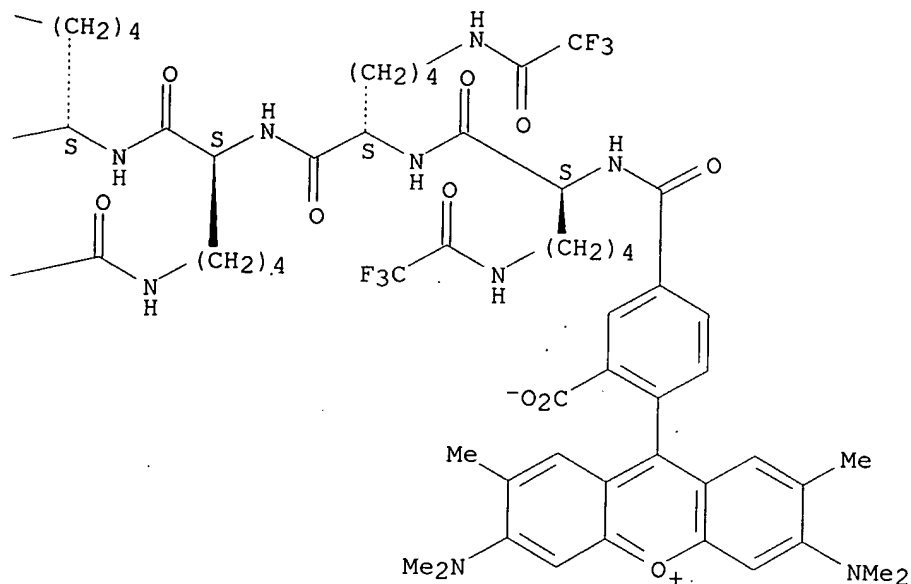
Absolute stereochemistry.

PAGE 1-A



Searched by P. Ruppel

PAGE 1-B



RN 608520-69-0 HCAPLUS

CN L-Lysine, N2-[3-carboxy-4-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)benzoyl]-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-, inner salt, 5-amide with 5-[3-[(7-amino-1-oxoheptyl)amino]-1-propynyl]-2',3'-dideoxyuridine 5'-(tetrahydrogen triphosphate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

NC1=NC(=O)C=C(N1[C@H]2C[C@@H](COP(=O)(O)OP(=O)(O)O)O2)C#CCNC(=O)CCCCCCCNC(=O)NC(F)(F)F

Chemical structure of compound 10, a macrocyclic peptide derivative. The structure shows a 14-membered ring with four L-proline residues and four L-alanine residues. The side chains include a 4-(trifluoromethyl)phenyl group, a 4-(trifluoromethyl)benzoyl group, and a 4-(trifluoromethyl)phenyl group. The structure is shown with stereochemistry and various labels like (CH<sub>2</sub>)<sub>4</sub>, F<sub>3</sub>C, and O<sub>2</sub>C.

$$\text{F}_3\text{C}-$$



PAGE 2-B



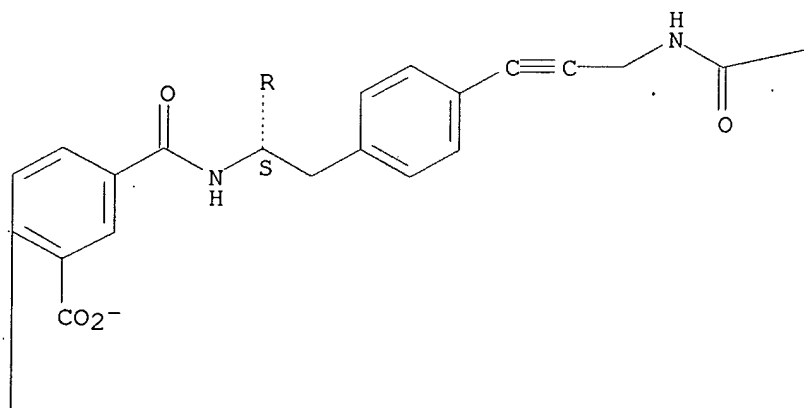
RN 608520-72-5 HCAPLUS

CN L-Lysinamide, N-[4-[3,6-bis(dimethylamino)-2,7-dimethylxanthylum-9-yl]-3-carboxybenzoyl]-4-[3-[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-propynyl]-L-phenylalanyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N-[7-[[3-[4-amino-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propynyl]amino]-7-oxoheptyl]-N6-(trifluoroacetyl)-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

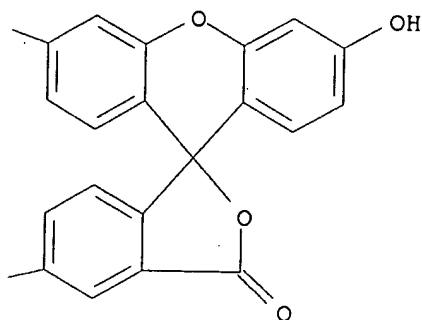
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HO

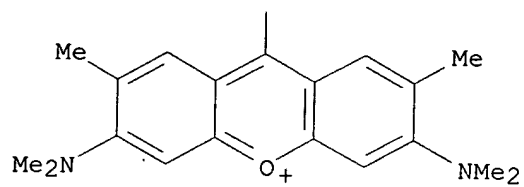


Searched by P. Ruppel

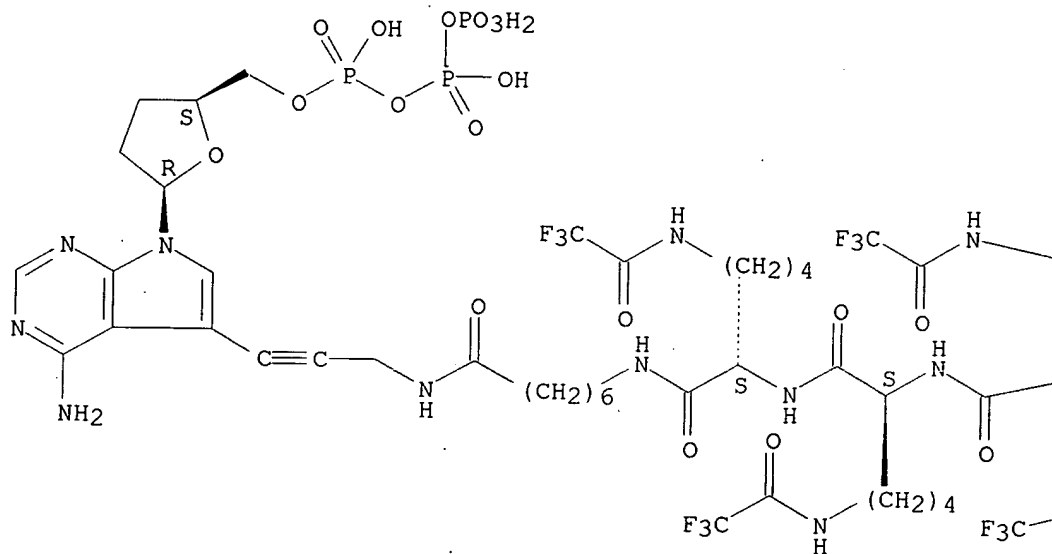
PAGE 1-B



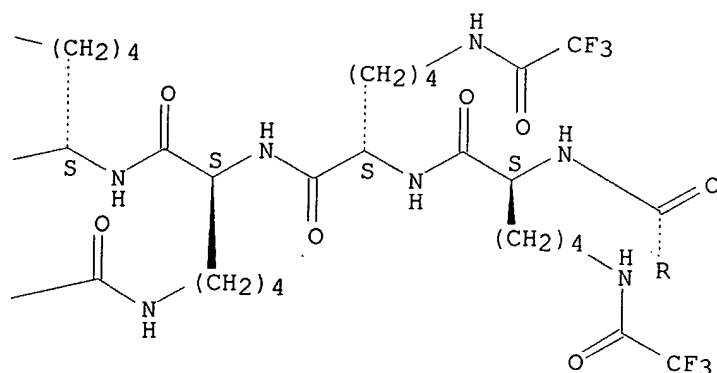
PAGE 2-A



PAGE 3-A



PAGE 3-B



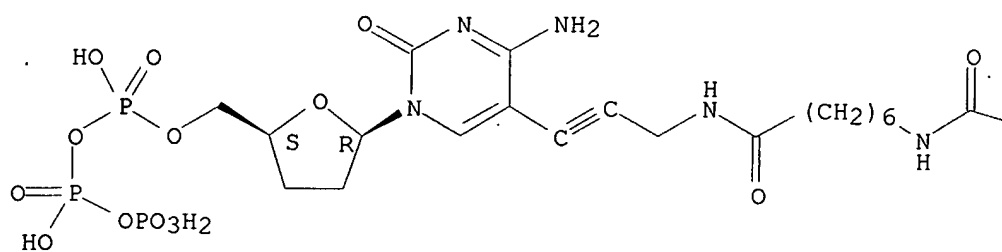
RN 608520-73-6 HCAPLUS

CN L-Lysine, N-[3-carboxy-4-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)benzoyl]-4-[3-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-propynyl]-L-phenylalanyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-, inner salt, 7-amide with 5-[3-[(7-amino-1-oxoheptyl)amino]-1-propynyl]-2',3'-dideoxyuridine 5'-(tetrahydrogen triphosphate) (9CI) (CA INDEX NAME)

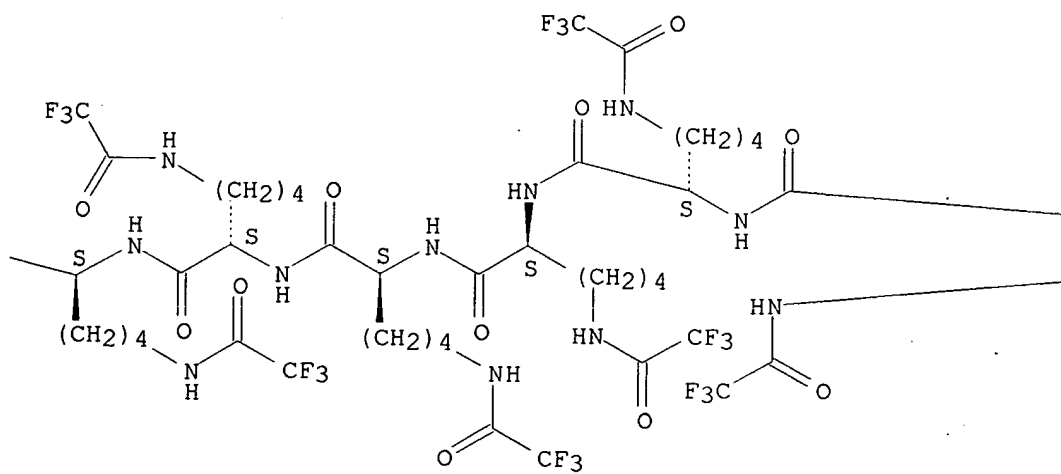
Absolute stereochemistry.

Searched by P. Ruppel

PAGE 1-A

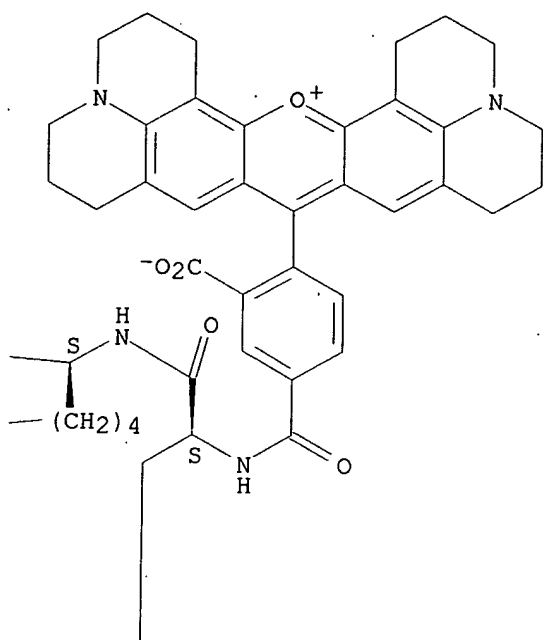


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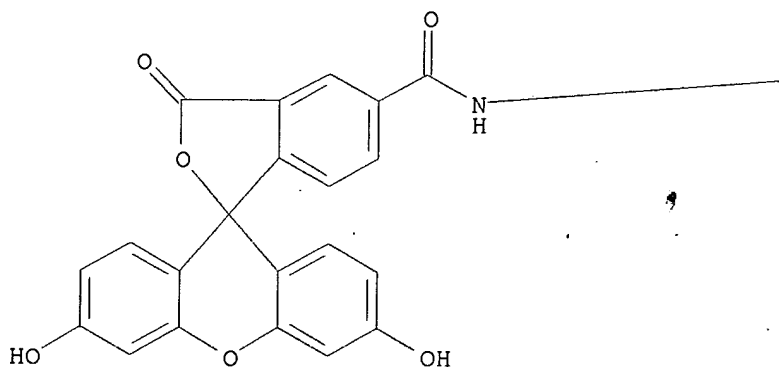


Searched by P. Ruppel

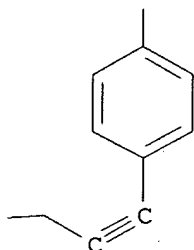
PAGE 1-C



PAGE 2-B



PAGE 2-C



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:491911 HCAPLUS

DOCUMENT NUMBER: 140:59894

TITLE: Synthesis of fluorophore and quencher monomers for use in Scorpion primers and nucleic acid structural probes

AUTHOR(S): McKeen, Catherine M.; Brown, Lynda J.; Nicol, Jamie T. G.; Mellor, John M.; Brown, Tom

CORPORATE SOURCE: Department of Chemistry, University of Southampton, Southampton, SO17 1BJ, UK

SOURCE: Organic & Biomolecular Chemistry (2003), 1(13), 2267-2275

CODEN: OBCRAK; ISSN: 1477-0520

PUBLISHER: Royal Society of Chemistry

DOCUMENT TYPE: Journal

LANGUAGE: English

CC 33-10 (Carbohydrates)

Section cross-reference(s): 3

IT 407-91-0P 4330-21-6P 637330-10-0P 637330-11-1P 637330-12-2P  
637330-13-3P 637330-14-4P 637330-15-5P 637330-17-7P 637330-18-8P  
637330-19-9P 637330-20-2P 637330-21-3P 637330-22-4P 637330-23-5P  
637330-24-6P **637330-25-7P 637330-26-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of nucleoside fluorophore and quencher monomers for use in Scorpion primers and nucleic acid structural probes)

IT **637330-25-7P 637330-26-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

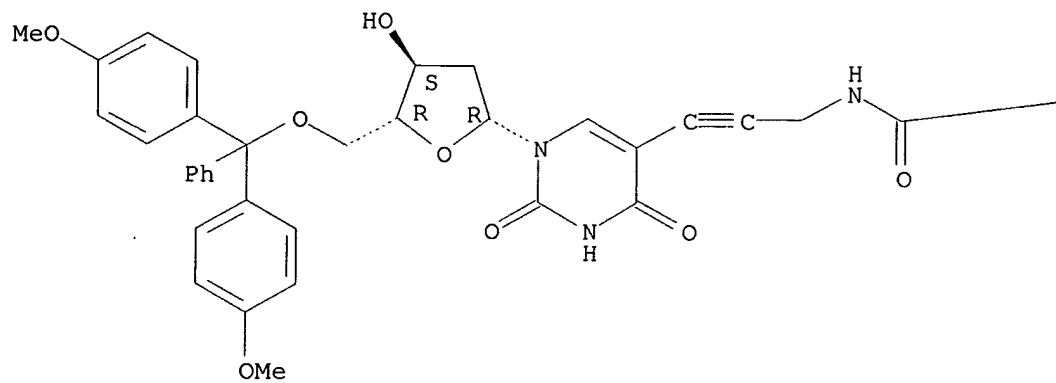
(synthesis of nucleoside fluorophore and quencher monomers for use in Scorpion primers and nucleic acid structural probes)

RN 637330-25-7 HCAPLUS

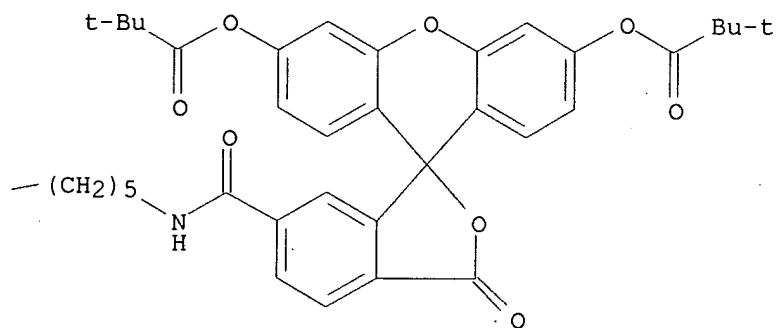
CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

PAGE 1-A



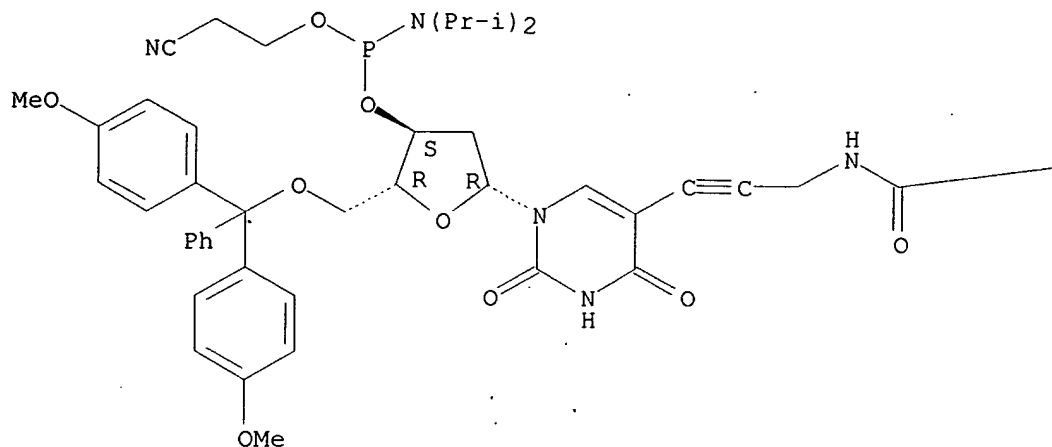
PAGE 1-B



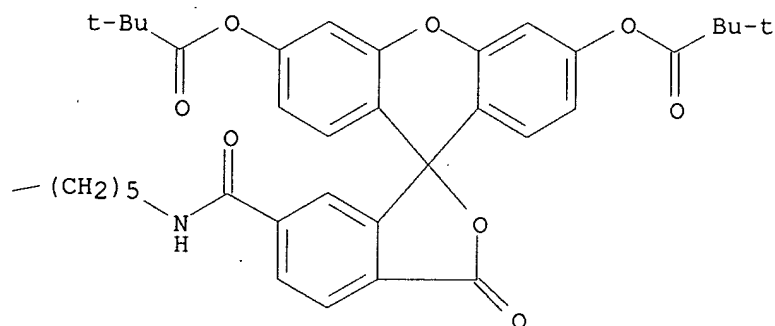
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CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS  
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L39 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2002:877127 HCAPLUS  
DOCUMENT NUMBER: 138:316979  
TITLE: RNA structure analysis assisted by capillary  
electrophoresis  
AUTHOR(S): Sobczak, Krzysztof; Krzyzosiak, Wlodzimierz J.  
CORPORATE SOURCE: Laboratory of Cancer Genetics, Polish Academy of  
Sciences, Institute of Bioorganic Chemistry, Poznan,  
61-704, Pol.  
SOURCE: Nucleic Acids Research (2002), 30(22), e124/1-e124/8  
CODEN: NARHAD; ISSN: 0305-1048  
PUBLISHER: Oxford University Press  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
CC 9-7 (Biochemical Methods)  
Section cross-reference(s): 3, 14



IT 512828-74-9 512828-76-1 512828-78-3  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (RNA structure anal. assisted by capillary electrophoresis)

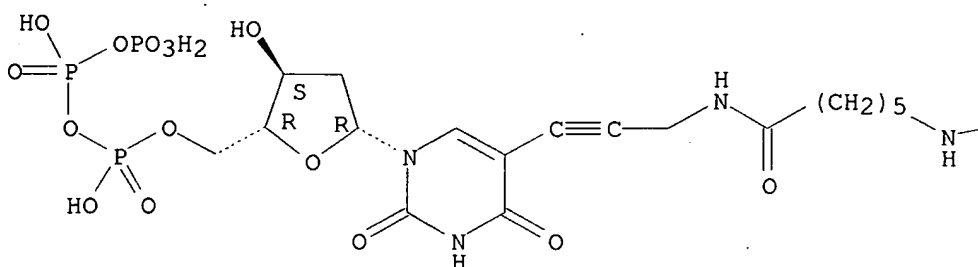
IT 512828-74-9 512828-76-1 512828-78-3  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (RNA structure anal. assisted by capillary electrophoresis)

RN 512828-74-9 HCAPLUS

CN Xanthylum, 3,6-diamino-9-[2-carboxy-5-[[[6-[[3-[1-[2-deoxy-5-O-  
 [hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-β-D-erythro-  
 pentofuranosyl]-1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl]-2-  
 propynyl]amino]-6-oxohexyl]amino]carbonyl]phenyl]-, inner salt (9CI) (CA  
 INDEX NAME)

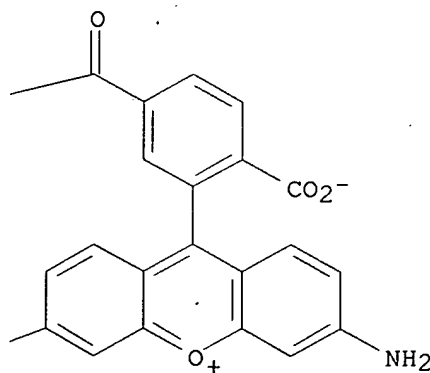
Absolute stereochemistry.

PAGE 1-A



H<sub>2</sub>N

PAGE 1-B

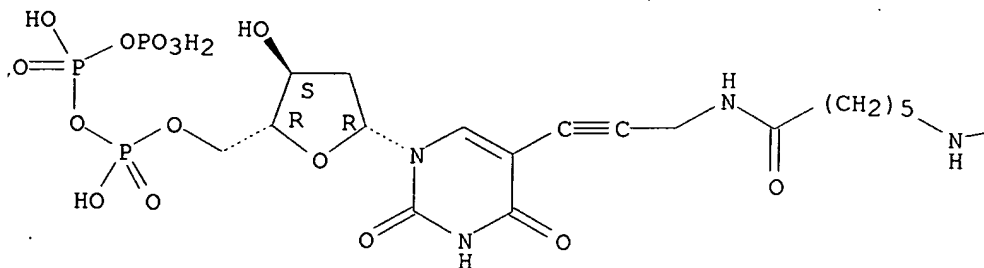


RN 512828-76-1 HCAPLUS

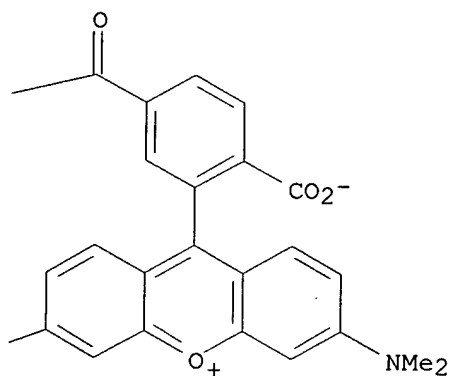
CN Xanthylum, 9-[2-carboxy-5-[[[6-[[3-[1-[2-deoxy-5-O-  
 [hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphinyl]-β-D-erythro-  
 pentofuranosyl]-1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl]-2-



PAGE 1-A

Me<sub>2</sub>N

PAGE 1-B



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 7 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:850353 HCAPLUS

DOCUMENT NUMBER: 137:347498

TITLE: Nucleic acid labeling compounds of heterocyclic derivatives containing a detectable moiety

INVENTOR(S): McGall, Glenn; Barone, Anthony D.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 68 pp., Cont.-in-part of U. S. 6,344,316.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 6

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

Searched by P. Ruppel

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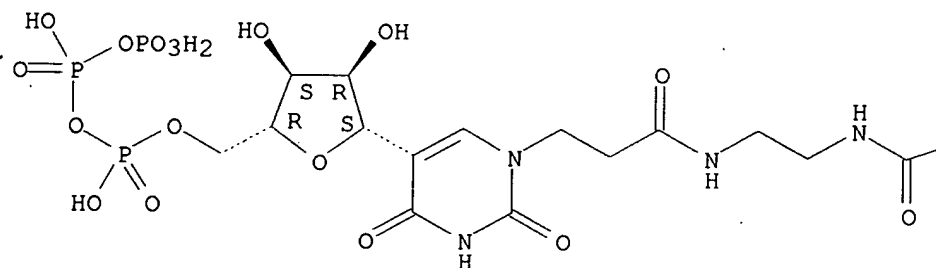
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US 2002165372      A1      20021107      US 2001-952387      20010911
WO 9727317         A1      19970731      WO 1997-US1603      19970122
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    DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC,
    LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
    RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN,
    AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW:  KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
    IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
    MR, NE, SN, TD, TG
US 6344316         B1      20020205      US 1997-882649      19970625
US 2003180757      A1      20030925      US 2002-314012      20021205
PRIORITY APPLN. INFO.:
US 1996-10471P     P      19960123
US 1997-35170P     P      19970109
WO 1997-US1603     A1      19970122
US 1997-882649     A2      19970625
US 2000-231827P    P      20000911
US 1998-126645     B2      19980731
US 2001-780574     A2      20010209
US 2001-952387     A2      20010911
US 2002-97113      A2      20020312

IC  ICM  C07H021-04
ICS  C07H019-052; C07D498-14; C07D045-14
NCL  536023100
CC   3-1 (Biochemical Genetics)
     Section cross-reference(s): 7, 9, 33
IT   61468-90-4DP, alkyl derivs. 194091-66-2P 459836-68-1P 459836-70-5P
     459836-71-6P 474378-45-5P 474378-47-7P 474378-49-9P
     474378-51-3P 474378-53-5P 474378-54-6P
     RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST
     (Analytical study); PREP (Preparation); USES (Uses)
     (nucleic acid labeling compds. of heterocyclic derivs. containing a
     detectable moiety)
IT   474378-45-5P
     RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST
     (Analytical study); PREP (Preparation); USES (Uses)
     (nucleic acid labeling compds. of heterocyclic derivs. containing a
     detectable moiety)
RN   474378-45-5 HCAPLUS
CN   1(2H)-Pyrimidinepropanamide, N-[2-[[6-[[[(3',6'-dihydroxy-3-
     oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-
     oxohexyl]amino]ethyl]-3,4-dihydro-5-[5-O-[hydroxy[[hydroxy(phosphonooxy)ph
     osphinyloxy]phosphinyl]-β-D-ribofuranosyl]-2,4-dioxo- (9CI) (CA
     INDEX NAME)

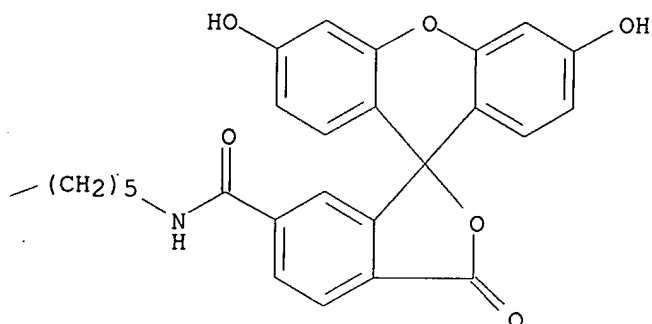
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Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



L39 ANSWER 8 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:716904 HCAPLUS

DOCUMENT NUMBER: 137:105879

TITLE: A quantitative analysis for the ADP-Ribosylation activity of pertussis toxin: An enzymatic-HPLC coupled assay applicable to formulated whole cell and acellular pertussis vaccine products

AUTHOR(S): Cyr, Terry; Menzies, Allan J.; Calver, Jerry; Whitehouse, Larry W.

CORPORATE SOURCE: Research Services Division, Health Products and Food Branch, Health Canada, Ottawa, K1A 0L2, Can.

SOURCE: Biologicals (2001), 29(2), 81-95  
CODEN: BILSEC; ISSN: 1045-1056

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal

LANGUAGE: English

CC 9-2 (Biochemical Methods)

Section cross-reference(s): 4, 14, 63

IT G proteins (guanine nucleotide-binding proteins)

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(quant. anal. for ADP-Ribosylation activity of pertussis toxin)

IT 443761-64-6P

RL: BSU (Biological study, unclassified); BUU (Biological use,

unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(quant. anal. for ADP-Ribosylation activity of pertussis toxin)

IT **443761-64-6P**

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

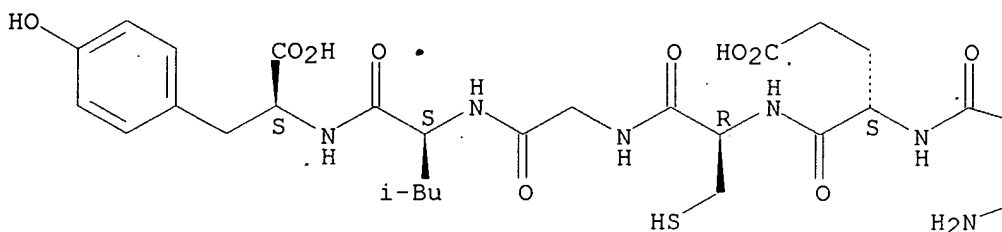
(quant. anal. for ADP-Ribosylation activity of pertussis toxin)

RN 443761-64-6 HCAPLUS

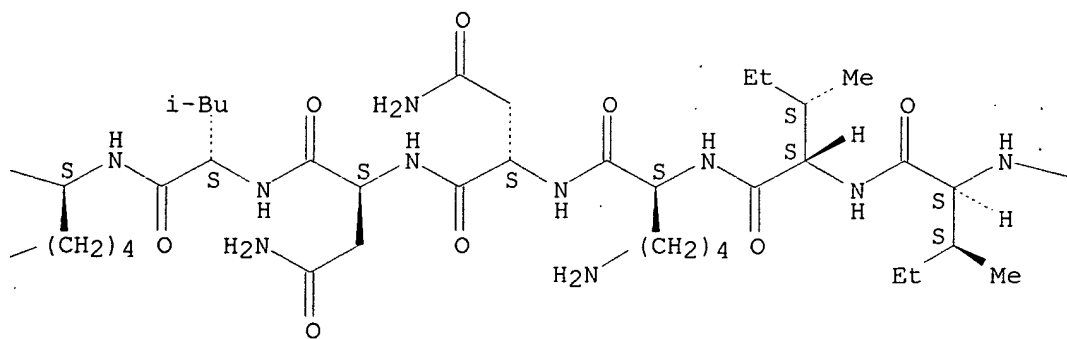
CN L-Tyrosine, N-[6-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-oxohexyl]-L-valyl-L-phenylalanyl-L- $\alpha$ -aspartyl-L-alanyl-L-valyl-L-threonyl-L- $\alpha$ -aspartyl-L-valyl-L-isoleucyl-L-isoleucyl-L-lysyl-L-asparaginyl-L-asparaginyl-L-leucyl-L-lysyl-L- $\alpha$ -glutamyl-L-cysteinylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

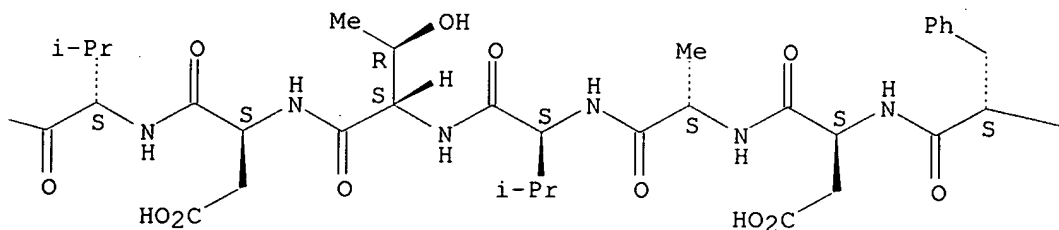
PAGE 1-A



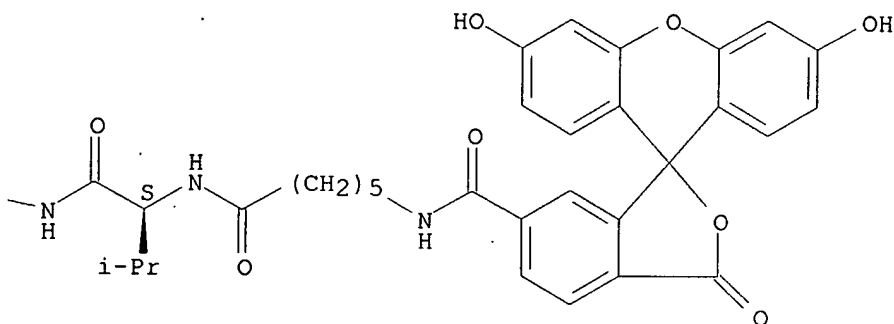
PAGE 1-B



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PAGE 1-D



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 9 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:208289 HCAPLUS

DOCUMENT NUMBER: 134:247912

TITLE: Charge-modified **nucleotide** terminators and

their use in sequencing and virus inhibition

INVENTOR(S): . Kumar, Shiv; Flick, Parke; Nelson, John; Finn,

Patrick; Nampalli, Satayam; Bull, Matthew

PATENT ASSIGNEE(S): Amersham Pharmacia Biotech, Inc., USA

SOURCE: PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001019841	A1	20010322	WO 2000-US25433	20000916
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,				

Searched by P. Ruppel

SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 EP 1214332 A1 20020619 EP 2000-963540 20000916  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL  
 PRIORITY APPLN. INFO.: US 1999-154739P P 19990917  
 WO 2000-US25433 W 20000916

IC ICM C07H019-10  
 ICS C07H019-20; C12Q001-68; G01N033-53; A61K031-7052; A61P031-12  
 CC 3-1 (Biochemical Genetics)  
 Section cross-reference(s): 1  
 IT Deoxyribonucleosides  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (2',3'-dideoxyribonucleosides, triphosphates, charged derivs.;  
 charge-modified **nucleotide** terminators and their use in  
 sequencing and virus inhibition)

IT Antiviral agents  
 DNA sequence analysis  
 (charge-modified **nucleotide** terminators and their use in  
 sequencing and virus inhibition)

IT 330679-95-3P 330679-96-4P 330680-07-4P **330680-10-9P**  
 330680-11-0P **330680-12-1P 330680-13-2P** 330680-18-7P  
 330680-20-1P 330680-21-2P 330862-00-5P  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (charge-modified **nucleotide** terminators and their use in  
 sequencing and virus inhibition)

IT 15924-28-4 23284-33-5 92557-80-7 260397-84-0 260397-85-1  
 260397-89-5 328252-36-4 328252-52-4 328252-53-5 330679-97-5  
 330680-14-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (charge-modified **nucleotide** terminators and their use in  
 sequencing and virus inhibition)

IT 150810-68-7P 209112-21-0P 209734-74-7P 219729-26-7P 328252-37-5P  
 328252-39-7P 328252-40-0P 328252-42-2P 328252-48-8P 328252-50-2P  
 330679-92-0P 330679-93-1P 330679-98-6P 330679-99-7P 330680-01-8P  
 330680-02-9P 330680-03-0P 330680-04-1P 330680-05-2P 330680-08-5P  
 330680-09-6P 330680-15-4P 330680-16-5P **330680-17-6P**  
 330680-19-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (charge-modified **nucleotide** terminators and their use in  
 sequencing and virus inhibition)

IT **330680-10-9P 330680-12-1P 330680-13-2P**  
 RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (charge-modified **nucleotide** terminators and their use in  
 sequencing and virus inhibition)

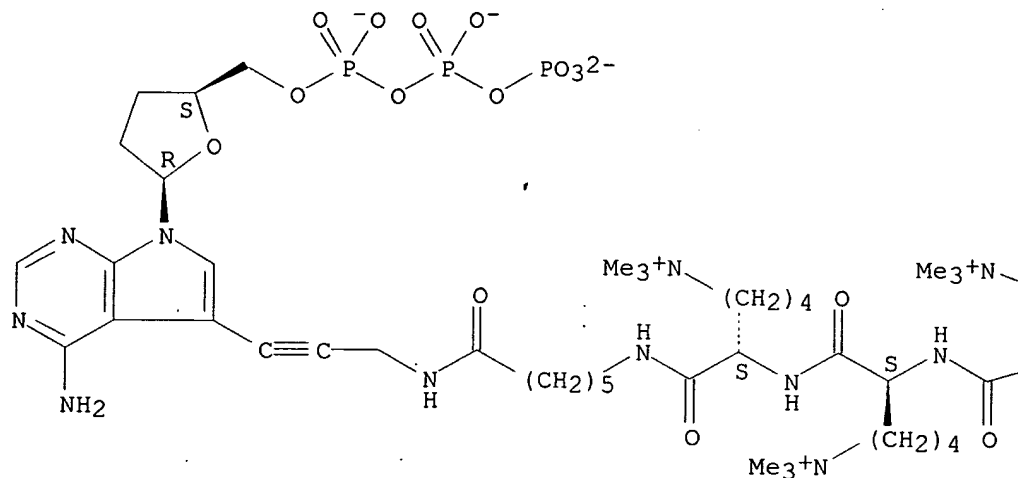
RN 330680-10-9 HCAPLUS  
 CN L-Norleucinamide, N-[3-[3,6-bis(dimethylamino)xanthylum-9-yl]-4-  
 carboxybenzoyl]-6-(trimethylammonio)-L-norleucyl-6-(trimethylammonio)-L-  
 norleucyl-6-(trimethylammonio)-L-norleucyl-6-(trimethylammonio)-L-  
 norleucyl-N-[6-[3-[4-amino-7-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-



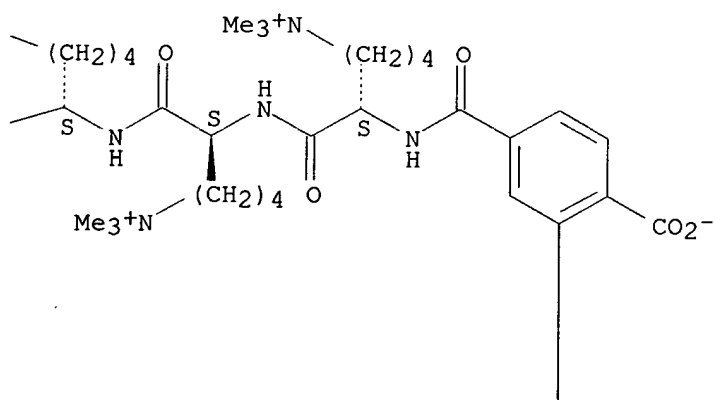
3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propynyl]amino]-6-oxohexyl]-6-(trimethylammonio)-, pentakis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

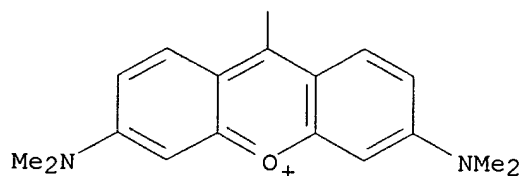
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PAGE 1-B



PAGE 2-B

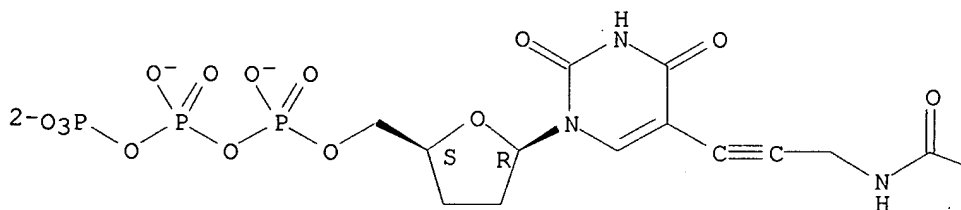


RN 330680-12-1 HCAPLUS

CN L-Norleucinamide, N-[[3',6'-bis(ethylamino)-2',7'-dimethyl-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl]carbonyl]-6-(trimethylammonio)-L-norleucyl-6-(trimethylammonio)-L-norleucyl-6-(trimethylammonio)-L-norleucyl-N-[6-oxo-6-[[3-[1,2,3,4-tetrahydro-2,4-dioxo-1-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-5-pyrimidinyl]-2-propynyl]amino]hexyl]-6-(trimethylammonio)-, tetrakis(inner salt)·(9CI) (CA INDEX NAME)

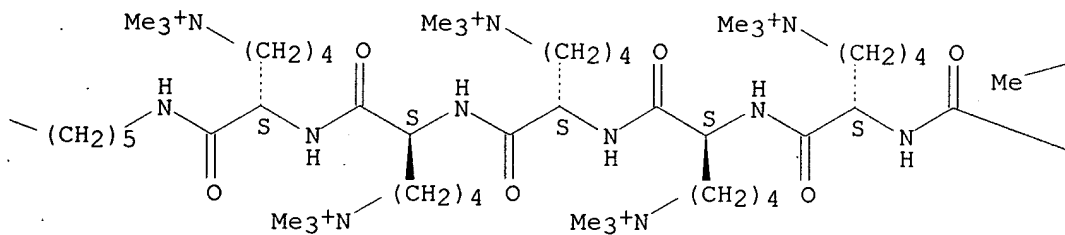
Absolute stereochemistry.

PAGE 1-A

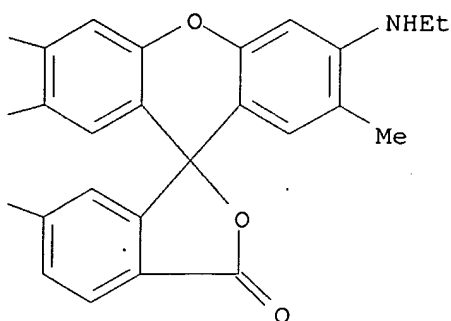


PAGE 1-B

EtNH—



PAGE 1-C

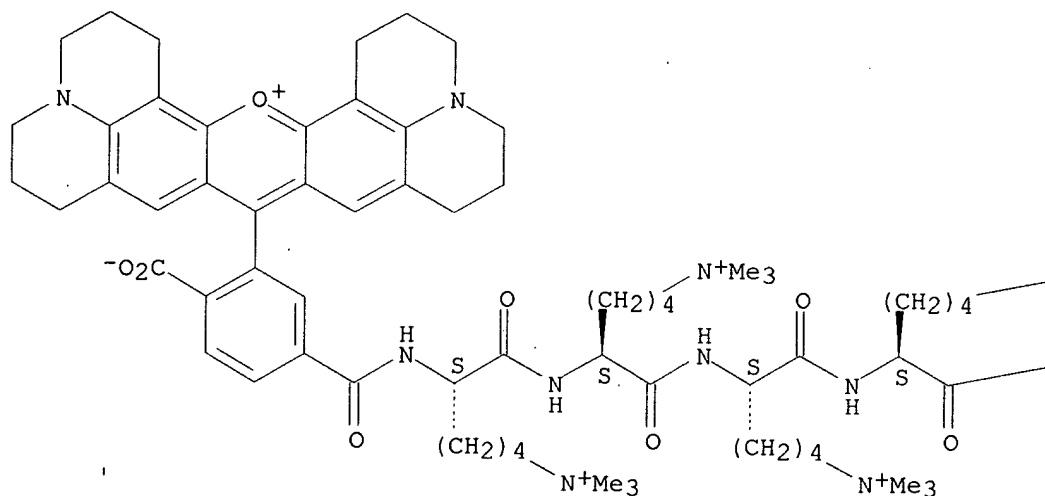


RN 330680-13-2 HCAPLUS

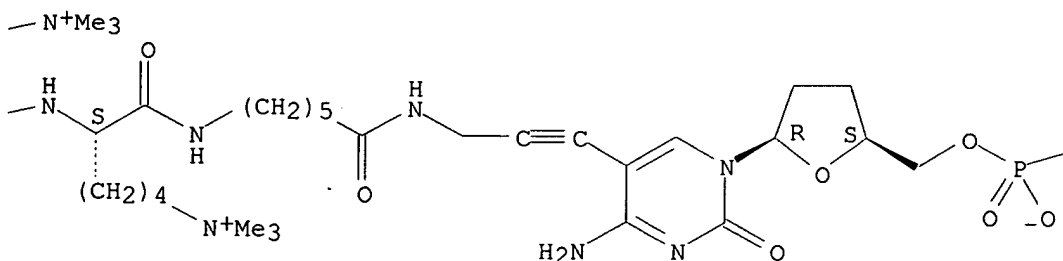
CN L-Norleucinamide, N-[4-carboxy-3-(2,3,6,7,12,13,16,17-octahydro-1H,5H,11H,15H-xantheno[2,3,4-ij:5,6,7-i'j'])diquinolizin-18-ium-9-yl)benzoyl]-6-(trimethylammonio)-L-norleucyl-6-(trimethylammonio)-L-norleucyl-6-(trimethylammonio)-L-norleucyl-6-(trimethylammonio)-L-norleucyl-N-[6-[3-[4-amino-1,2-dihydro-2-oxo-1-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-5-pyrimidinyl]-2-propynyl]amino]-6-oxohexyl]-6-(trimethylammonio)-, pentakis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

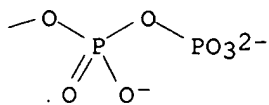
PAGE 1-A



PAGE 1-B



PAGE 1-C



IT 330680-17-6P

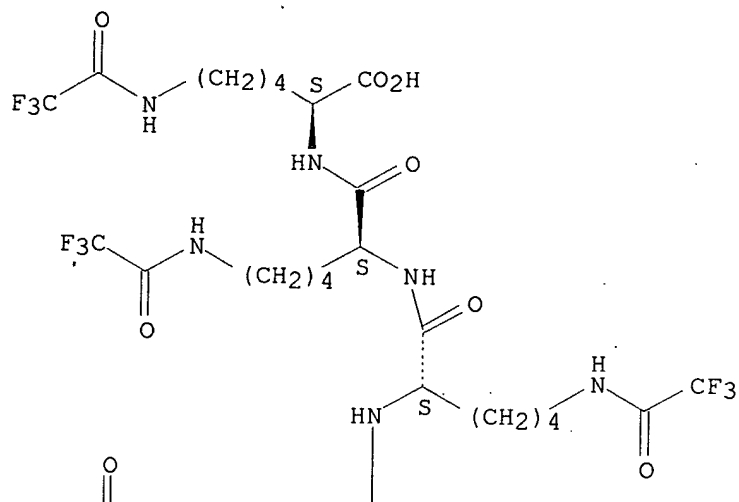
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

. (charge-modified **nucleotide** terminators and their use in sequencing and virus inhibition)

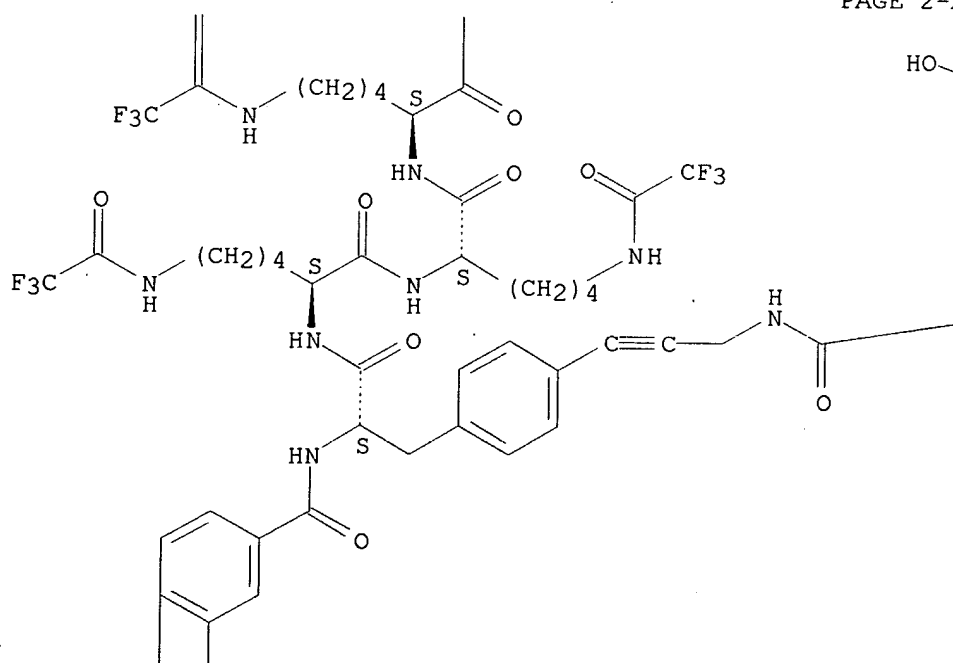
RN 330680-17-6 HCAPLUS

CN L-Lysine, N-[4-[3,6-bis(dimethylamino)xanthylum-9-yl]-3-carboxybenzoyl]-4-[3-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-1-propynyl]-L-phenylalanyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-L-lysyl-N6-(trifluoroacetyl)-, inner salt (9CI) (CA INDEX NAME)

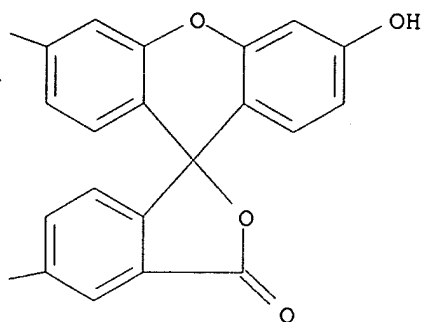
PAGE 1-A



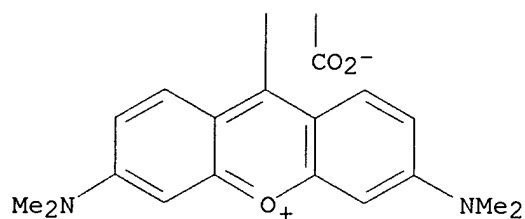
HO—



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PAGE 3-A



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 10 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:192615 HCAPLUS

DOCUMENT NUMBER: 134:221523

TITLE: Glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme

INVENTOR(S): Withers, Stephen G.; Loughheed, Brenda

PATENT ASSIGNEE(S): The University of British Columbia, Can.

SOURCE: U.S., 24 pp., Cont.-in-part of U.S. 5,952,203.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6204029	B1	20010320	US 1998-57863	19980409
US 5952203	A	19990914	US 1997-835941	19970411
PRIORITY APPLN. INFO.:			US 1997-835941	A2 19970411
OTHER SOURCE(S):		CASREACT 134:221523		
IC	ICM	C12P019-18		
ICS		C12P019-04; C12N011-12; C12N009-10		
NCL		435097000		
CC		16-2 (Fermentation and Bioindustrial Chemistry)		

Searched by P. Ruppel

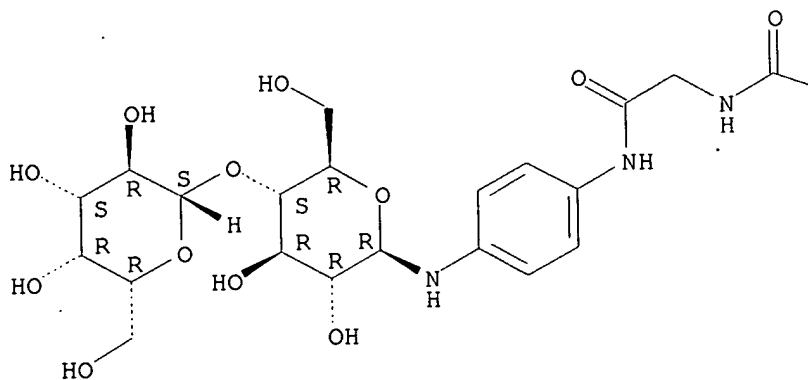
- IT Antibiotics  
(aminoglycoside; glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT Monosaccharides  
Oligosaccharides, preparation  
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT Galactosides  
RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)  
( $\alpha$ -galactosides; glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT 2021-84-3P,  $\alpha$ -D-Galactosyl fluoride  
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT 58-98-0, 5'-UDP, biological studies 63-42-3, Lactose 2021-62-7,  
 $\beta$ -D-Galactopyranosyl fluoride 2106-10-7,  $\alpha$ -D-Glucosyl fluoride 2557-18-8 2713-54-4,  $\alpha$ -D-Mannopyranosyl fluoride 4536-02-1,  $\alpha$ -D-Xylopyranosyl fluoride 7617-95-0,  
 $\beta$ -D-Glucopyranosyl fluoride 60894-73-7 108393-17-5,  
 $\beta$ -D-Xylopyranosyl fluoride 129864-98-8 143131-27-5 210281-95-1,  
 $\beta$ -D-Mannopyranosyl fluoride 214707-71-8 214707-72-9 214707-73-0 214707-74-1  
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT 2956-16-3, UDP galactose  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT 9031-48-5, Glucosyltransferase 9055-06-5, Mannosyltransferase 9068-09-1,  $\alpha$ -Galactosyltransferase 9068-10-4,  $\beta$ -Galactosyl transferase 9075-81-4,  $\alpha$ -Sialyl transferase 56626-18-7, Fucosyltransferase 56831-68-6,  $\alpha$ -N-Acetylhexosaminyl transferase 61642-39-5,  $\alpha$ -Xylosyl transferase 153272-41-4  
RL: CAT (Catalyst use); USES (Uses)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT 4163-59-1P, 1,2,3,4,6-Penta-O-acetyl  $\alpha$ -D-galactopyranose  
RL: PRP (Properties); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and **nucleotide** phosphate sugar-dependent enzyme)
- IT 4163-44-4P  
RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)

(glycosylated acceptor synthesis catalyzed by glycosyl transferase and nucleotide phosphate sugar-dependent enzyme)  
IT 59-23-4, D-Galactose, reactions 108-24-7, Acetic anhydride 7664-39-3, Hydrogen fluoride, reactions 32001-55-1 340698-58-0  
340698-66-0 340698-75-1 340699-05-0  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and nucleotide phosphate sugar-dependent enzyme)  
IT 13168-24-6P 88262-62-8P 340291-98-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and nucleotide phosphate sugar-dependent enzyme)  
IT 340698-66-0 340699-05-0  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(glycosylated acceptor synthesis catalyzed by glycosyl transferase and nucleotide phosphate sugar-dependent enzyme)  
RN 340698-66-0 HCAPLUS  
CN Spiro[isobenzofuran-1(3H), 9'-[9H]xanthene]-6-carboxamide, N-[2-[[4-(β-D-galactopyranosylamino)phenyl]amino]-2-oxoethyl]-3',6'-dihydroxy-3-oxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

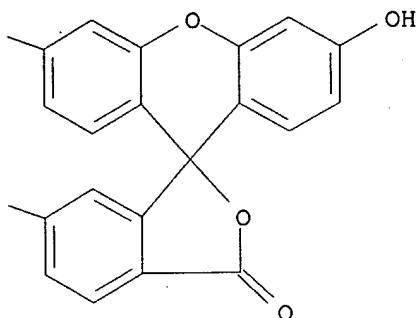
PAGE 1-A

HO—



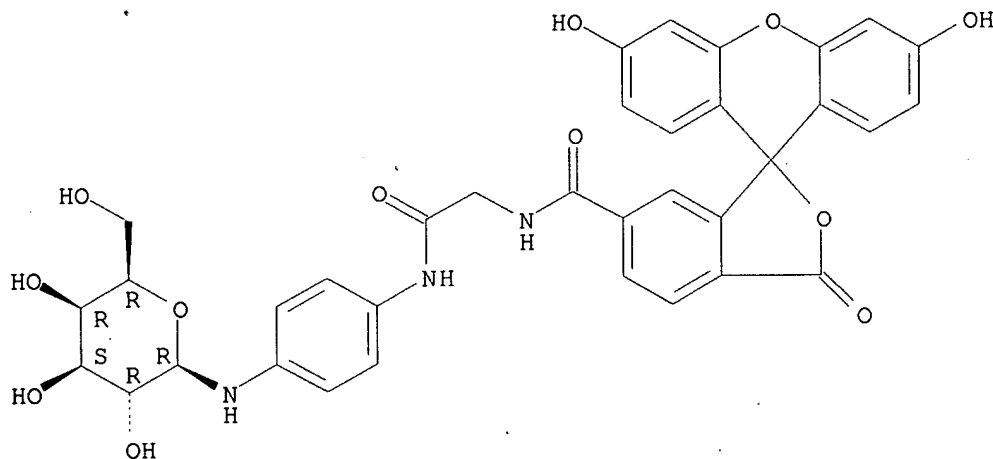


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RN	340699-05-0	HCAPLUS
CN	Spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-6-carboxamide, N-[2-[4-[4-(4-O-β-D-galactopyranosyl-β-D-glucopyranosyl)amino]phenyl]amino]-2-oxoethyl]-3',6'-dihydroxy-3-oxo- (9CI) (CA INDEX NAME)	

Absolute stereochemistry.



REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 11 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:438386 HCAPLUS

DOCUMENT NUMBER: 133:222958

DOCUMENT NUMBER: 1897222900  
TITLE: Oligonucleotides functionalized by fluorescein and rhodamine dyes: Michael addition of methyl acrylate to 2'-deoxypseudouridine

AUTHOR(S): Ramzaeva, Natalya; Rosemeyer, Helmut; Leonard, Peter; Muhlegger, Klaus; Bergmann, Frank; Von der Eltz, Herbert; Seela, Frank

CORPORATE SOURCE:                   Laboratorium für Organische und Bioorganische Chemie,  
  Institut für Chemie, Universität Osnabrück, Osnabrück,  
  D-49069, Germany

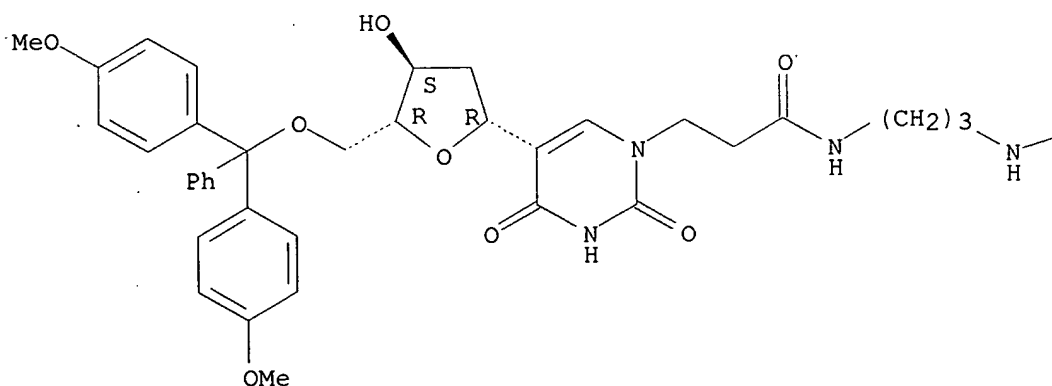
SOURCE: Helvetica Chimica Acta (2000), 83(6), 1108-1126

Searched by P. Ruppel

CODEN: HCACAV; ISSN: 0018-019X  
PUBLISHER: Verlag Helvetica Chimica Acta  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 133:222958  
CC 33-10 (Carbohydrates)  
IT 197103-01-8P 197103-02-9P 215026-89-4P 289712-89-6P 289712-90-9P  
289712-91-0P 289712-92-1P 289712-94-3P 289712-95-4P  
**289712-96-5P 289712-97-6P** 290840-86-7DP,  
solid-supported 290840-87-8DP, solid-supported 290840-88-9P  
290840-89-0P 291315-09-8P 291315-10-1P 291315-11-2P 291315-14-5P  
291315-17-8P 291315-20-3P 291784-88-8P 291784-91-3P 291784-93-5P  
291784-96-8P 291784-98-0P 291785-01-8P 291785-03-0P 291785-07-4P  
291785-09-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(Michael addition of Me acrylate to 2'-deoxypseudouridine in the  
functionalization of oligonucleotides by fluorescein and rhodamine  
dyes)  
IT **289712-96-5P 289712-97-6P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(Michael addition of Me acrylate to 2'-deoxypseudouridine in the  
functionalization of oligonucleotides by fluorescein and rhodamine  
dyes)  
RN 289712-96-5 HCAPLUS  
CN Propanoic acid, 2,2-dimethyl-, 5-[[[6-[[3-[[3-[5-[5-O-[bis(4-  
methoxyphenyl)phenylmethyl]-2-deoxy- $\beta$ -D-erythro-pentofuranosyl]-3,4-  
dihydro-2,4-dioxo-1(2H)-pyrimidinyl]-1-oxopropyl]amino]propyl]amino]-6-  
oxohexyl]amino]carbonyl]-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-  
3',6'-diyl ester (9CI) (CA INDEX NAME)

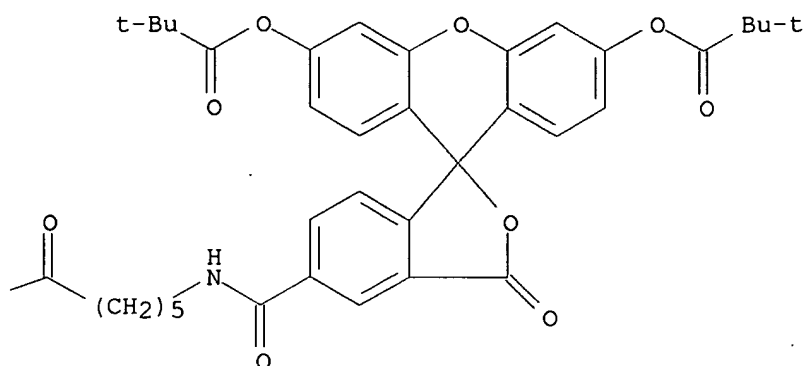
Absolute stereochemistry.

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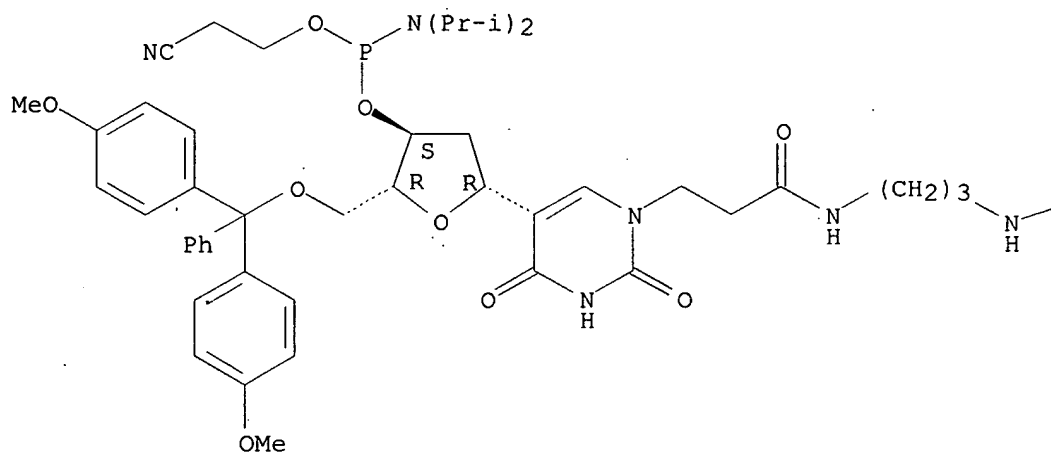


RN 289712-97-6 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, 5-[[[6-[[3-[[3-[5-[5-O-[bis(4-methoxyphenyl)phenylmethyl]-3-O-[[bis(1-methylethyl)amino](2-cyanoethoxy)phosphino]-2-deoxy-β-D-erythro-pentofuranosyl]-3,4-dihydro-2,4-dioxo-1(2H)-pyrimidinyl]-1-oxopropyl]amino]propyl]amino]-6-oxohexyl]amino]carbonyl]-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester (9CI) (CA INDEX NAME)

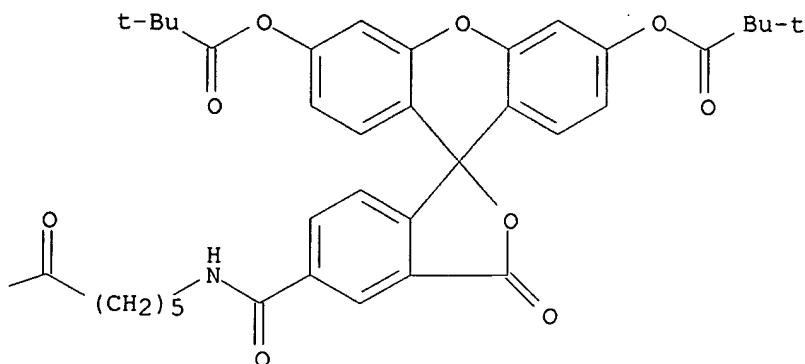
Absolute stereochemistry.

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Searched by P. Ruppel

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REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 12 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2000:314834 HCAPLUS

DOCUMENT NUMBER: 132:344104

TITLE: Cloning and production of human adenine nucleotide translocator and the synthesis and screening assays for novel ligands

INVENTOR(S): Anderson, Christen M.; Davis, Robert E.; Clevenger, William; Wiley, Sandra Eileen; Miller, Scott W.; Szabo, Tomas R.; Ghosh, Soumitra S.

PATENT ASSIGNEE(S): Mitokor, USA

SOURCE: PCT Int. Appl., 175 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000026370	A2	20000511	WO 1999-US25883	19991103
WO 2000026370	A3	20001116		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1049780	A1	20001108	EP 1999-968032	19991103
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002539761	T2	20021126	JP 2000-579742	19991103
US 2001044144	A1	20011122	US 2001-811094	20010314
US 2002012992	A1	20020131	US 2001-810644	20010314
PRIORITY APPLN. INFO.:				
			US 1998-185904	A 19981103
			US 1999-393441	A 19990908

WO 1999-US25883 W 19991103

OTHER SOURCE(S): MARPAT 132:344104

- IC ICM C12N015-12  
ICS C07K014-47; C12N015-62; C12N005-10; C12N009-00; C12N015-86;  
G01N033-50
- CC. 3-2 (Biochemical Genetics)  
Section cross-reference(s): 1, 9, 33
- ST adenine **nucleotide** translocator cloning atractyloside ligand screening
- IT Transport proteins  
RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process)  
(ADP/ATP carrier; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Animal cell line  
(SF9, recombinant expression host; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Proteins, specific or class  
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(YFP (yellow fluorescent protein), fusion products; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Drug screening  
Molecular cloning  
(cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Promoter (genetic element)  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Proteins, specific or class  
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(green fluorescent, fusion products; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Animal cell  
(insect, recombinant expression host; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Animal cell  
(mammalian, recombinant expression host; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Mitochondria  
Mitochondria  
(membrane, localization in; cloning and production of human adenine

- nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Membrane, biological  
Membrane, biological  
(mitochondrial, localization in; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Bacteria (Eubacteria)  
Escherichia coli  
Trichoplusia ni  
Yeast  
(recombinant expression host; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT Transcription factors  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(repressors; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT 108778-97-8P 113285-74-8P 125724-85-8P  
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(amino acid sequence; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT 50812-37-8DP, Glutathione S-transferase, fusion product with adenine **nucleotide** translocator  
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT 267886-17-9P 267886-18-0P 267886-19-1P  
RL: ARG (Analytical reagent use); RCT (Reactant); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT 267886-22-6P 267886-23-7P 267886-24-8P 267886-25-9P 267886-26-0P  
267886-27-1P 267886-28-2P 267886-29-3P 267886-30-6P  
267886-31-7P 267886-50-0P 267886-51-1P 267886-56-6P  
267886-57-7P  
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)  
(cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT 17754-44-8P, Atractyloside 33286-30-5DP, Carboxyatractyloside, derivs.  
268557-13-7P  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)  
(cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)
- IT 84882-67-7P 267886-32-8P 267886-33-9P 267886-34-0P 267886-35-1P

267886-36-2P 267886-37-3P 267886-38-4P 267886-39-5P 267886-40-8P  
 267886-41-9P 267886-42-0P 267886-43-1P 267886-44-2P 267886-45-3P  
 267886-46-4P 267886-47-5P 267886-48-6P 267886-49-7P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)

IT 11076-19-0, Bongkreikic acid  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
 (cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)

IT 99-96-7, 4-Hydroxybenzoic acid, reactions 501-97-3, 3-(4-Hydroxyphenyl)propionic acid 578-58-5, 2-Methylanisole 3443-45-6, 1-Pyrenebutyric acid 16712-64-4, 6-Hydroxy-2-naphthoic acid 34071-95-9 50995-74-9 267886-54-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)

IT 13811-11-5P 33446-14-9P, 3-(4-Methoxy-3-methylbenzoyl)propionic acid 33446-15-0P, 4-(4-Methoxy-3-methylphenyl)butyric acid 53937-19-2P 267886-16-8P 267886-20-4P 267886-21-5DP, alkylldiamine derivs. 267886-21-5P 267886-53-3P 267886-55-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)

IT 268533-61-5P 268533-62-6P 268533-63-7P  
 RL: ARU (Analytical role, unclassified); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation)  
 (**nucleotide** sequence; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)

IT 268534-28-7, 1: PN: WO0026370 SEQID: 4 unclaimed DNA 268534-29-8, 2: PN: WO0026370 SEQID: 5 unclaimed DNA 268534-30-1, 3: PN: WO0026370 SEQID: 6 unclaimed DNA 268534-31-2, 4: PN: WO0026370 SEQID: 7 unclaimed DNA 268534-32-3, 5: PN: WO0026370 SEQID: 8 unclaimed DNA 268534-33-4, 6: PN: WO0026370 SEQID: 9 unclaimed DNA 268534-34-5, 7: PN: WO0026370 SEQID: 10 unclaimed DNA 268534-35-6, 8: PN: WO0026370 SEQID: 11 unclaimed DNA 268534-36-7, 9: PN: WO0026370 SEQID: 12 unclaimed DNA 268534-37-8 268534-38-9 268534-39-0 268534-40-3 268534-41-4 268534-42-5 268534-43-6 268534-44-7 268534-45-8 268534-46-9 268534-47-0 268534-48-1 268534-49-2 268534-50-5 268534-51-6 268534-52-7 268534-53-8, GenBank AX134746 268534-54-9 268534-55-0 268534-56-1  
 RL: PRP (Properties)  
 (unclaimed **nucleotide** sequence; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)

IT 268230-34-8  
 RL: PRP (Properties)  
 (unclaimed sequence; cloning and production of human adenine **nucleotide** translocator and the synthesis and screening assays for novel ligands)

IT 267886-27-1P 267886-51-1P 267886-57-7P  
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

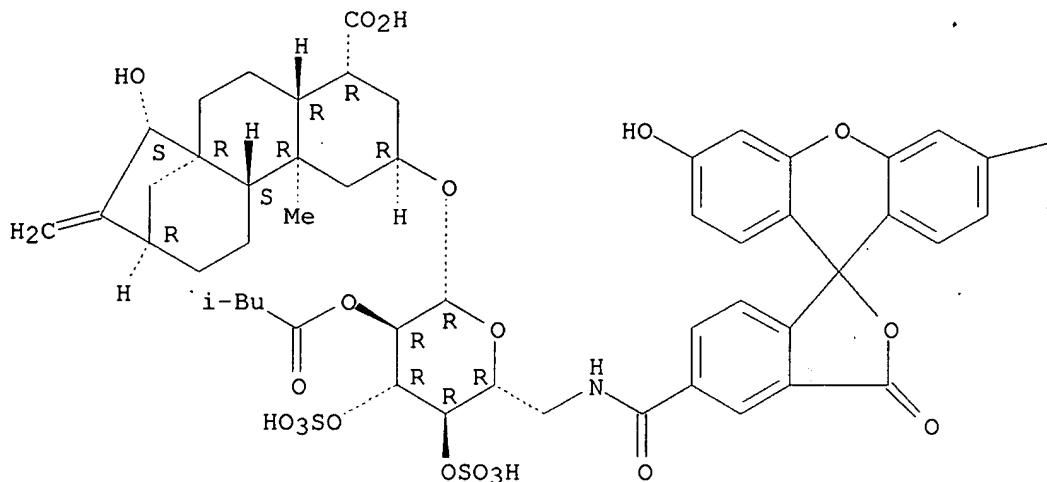
(cloning and production of human adenine **nucleotide** translocator  
and the synthesis and screening assays for novel ligands)

RN 267886-27-1 HCAPLUS

CN 19-Norkaur-16-en-18-oic acid, 2-[[6-deoxy-6-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo- $\beta$ -D-glucopyranosyl]oxy]-15-hydroxy-, (2 $\beta$ ,4 $\alpha$ ,15 $\alpha$ )-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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—OH

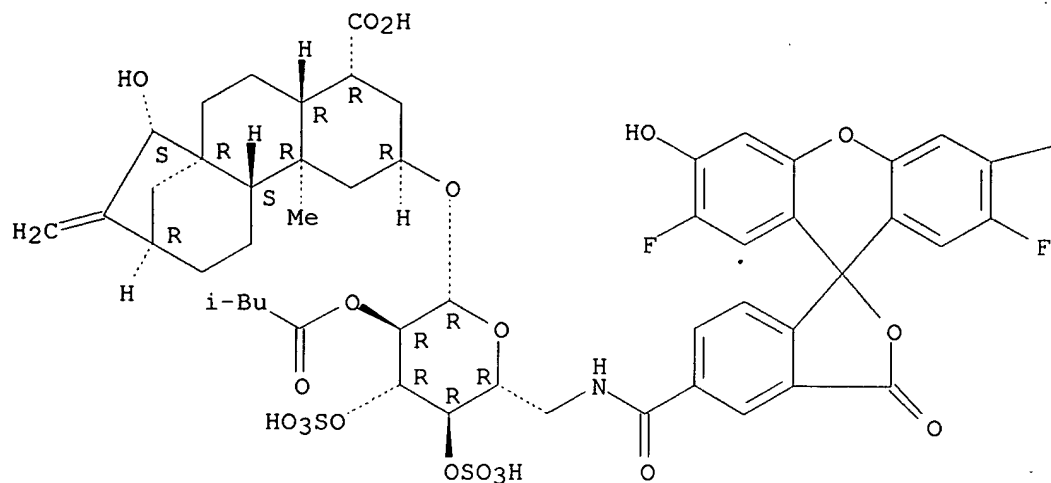
RN 267886-51-1 HCAPLUS

CN 19-Norkaur-16-en-18-oic acid, 2-[[6-deoxy-6-[[[2',7'-difluoro-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]-2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo- $\beta$ -D-glucopyranosyl]oxy]-15-hydroxy-, (2 $\beta$ ,4 $\alpha$ ,15 $\alpha$ )-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



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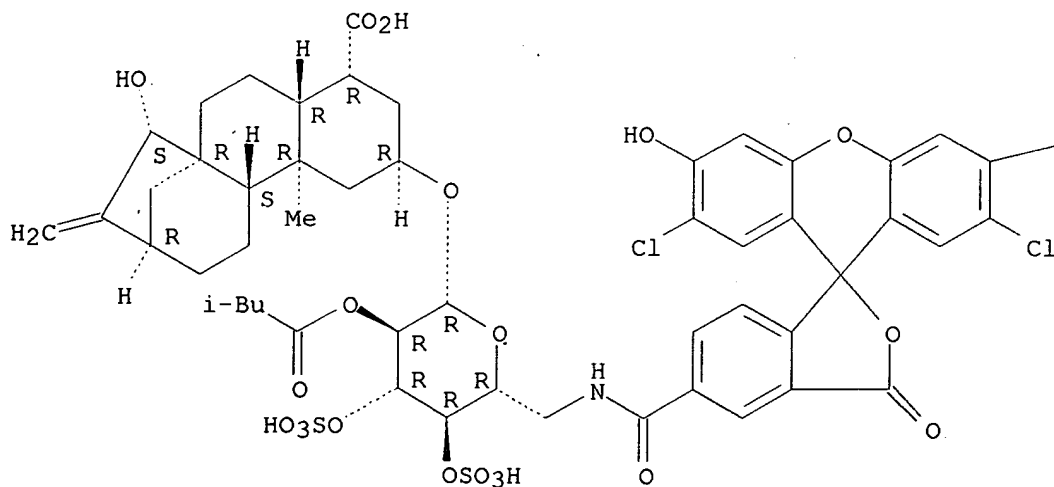
PAGE 1-B

—OH

RN 267886-57-7 HCAPLUS  
 CN 19-Norkaur-16-en-18-oic acid, 2-[[6-deoxy-6-[[[(2',7'-dichloro-3',6'-  
 dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-  
 yl)carbonyl]amino]-2-O-(3-methyl-1-oxobutyl)-3,4-di-O-sulfo-β-D-  
 glucopyranosyl]oxy]-15-hydroxy-, (2β,4α,15α)- (9CI) (CA  
 INDEX NAME)

Absolute stereochemistry.

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Searched by P. Ruppel

PAGE 1-B

—OH

L39 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1999:561610 HCAPLUS  
DOCUMENT NUMBER: 131:166214  
TITLE: Energy transfer dyes with enhanced fluorescence,  
reagents containing them, and their use in nucleic  
acid sequencing  
INVENTOR(S): Lee, Linda G.; Spurgeon, Sandra L.; Rosenblum, Barnett  
PATENT ASSIGNEE(S): Perkin-Elmer Corporation, USA  
SOURCE: U.S., 77 pp., Cont.-in-part of U.S. 5,863,727.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5945526	A	19990831	US 1998-46203	19980323
US 5863727	A	19990126	US 1996-642330	19960503
US 5847162	A	19981208	US 1996-672196	19960627
JP 2003221515	A2	20030808	JP 2002-280013	19970521
US 6335440	B1	20020101	US 1999-272097	19990318
US 2002086985	A1	20020704	US 2001-14743	20011029

PRIORITY APPLN. INFO.:  
US 1996-642330 A2 19960503  
US 1996-672196 A2 19960627  
US 1996-726462 A1 19961004  
JP 1998-502974 A3 19970521  
US 1998-46203 A1 19980323  
US 1999-272097 A1 19990318

OTHER SOURCE(S): MARPAT 131:166214

IC ICM C07H021-04

NCL 536026600

CC 3-1 (Biochemical Genetics)

Section cross-reference(s): 41

IT **Nucleosides**, biological studies

**Nucleotides**, biological studies

Oligonucleotides

RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process)

(fluorescent dye conjugates; energy transfer dyes with enhanced fluorescence, reagents containing them, and their use in nucleic acid sequencing)

IT 198546-42-8P 198546-50-8P **212389-88-3P** 212389-91-8P  
212389-95-2P 212389-97-4P **212389-99-6P** 212390-01-7P  
**212390-02-8P** 212390-03-9P 238412-73-2P 238412-74-3P

238412-75-4P

RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(energy transfer dyes with enhanced fluorescence, reagents containing them, and their use in nucleic acid sequencing)

IT 212389-88-3P 212389-99-6P 212390-02-8P

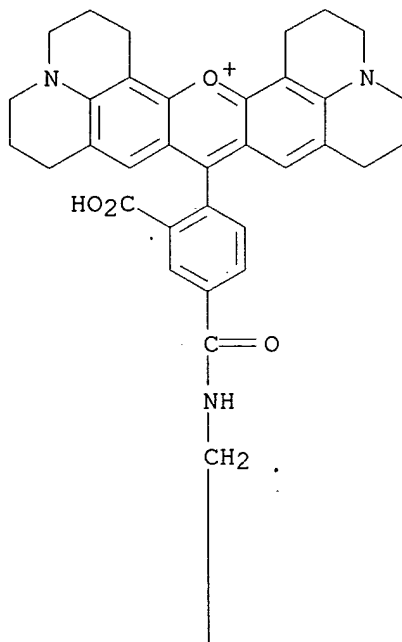
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(energy transfer dyes with enhanced fluorescence, reagents containing them, and their use in nucleic acid sequencing)

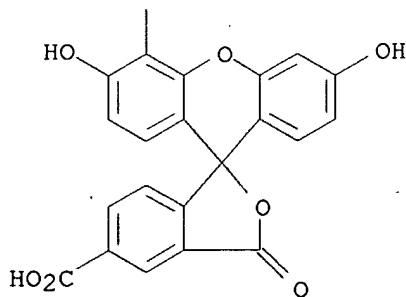
RN 212389-88-3 HCAPLUS

CN 1H,5H,11H,15H-Xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium,  
9-[2-carboxy-4-[[[(5-carboxy-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)methyl]amino]carbonyl]phenyl]-  
2,3,6,7,12,13,16,17-octahydro- (9CI) (CA INDEX NAME)

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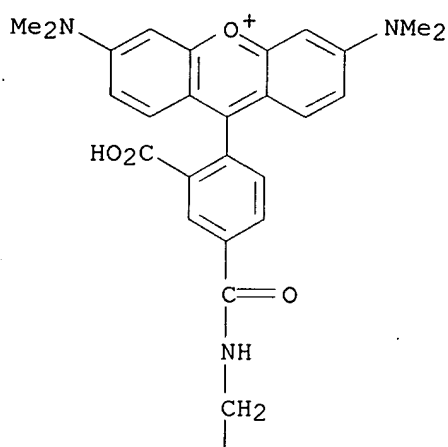
PAGE 2-A



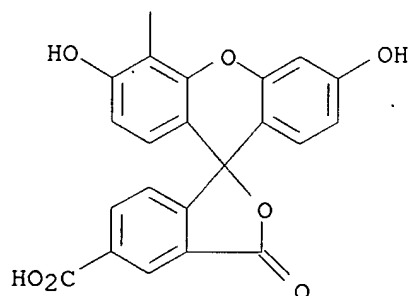
Searched by P. Ruppel

RN 212389-99-6 HCAPLUS  
CN Xanthylium, 9-[2-carboxy-4-[[[(5-carboxy-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)methyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)- (9CI) (CA INDEX NAME)

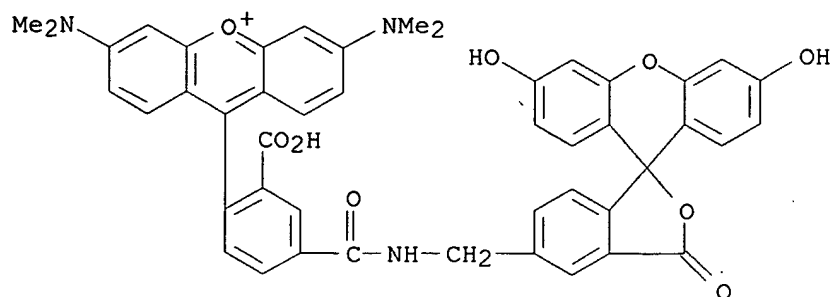
PAGE 1-A



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RN 212390-02-8 HCAPLUS  
CN Xanthylium, 9-[2-carboxy-4-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)methyl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1999:113697 HCAPLUS

DOCUMENT NUMBER: 130:139583

TITLE: Preparation of **nucleotide** analogs as enzyme substrates in the chain-elongation of DNA

INVENTOR(S): Simmonds, Adrian; Hamilton, Alan; Smith, Clifford; Loakes, David; Brown, Daniel; Hill, Fergal; Kumar, Shiv; Nampalli, Satyam; McDougall, Mark

PATENT ASSIGNEE(S): Nycomed Amersham PLC, UK

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9906422	A2	19990211	WO 1998-GB2306	19980731
WO 9906422	A3	19990603		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9885528	A1	19990222	AU 1998-85528	19980731
EP 1003762	A2	20000531	EP 1998-936566	19980731
R: AT, BE, CH, DE, DK, FR, GB, IT, LI, NL, SE				
JP 2001512131	T2	20010821	JP 2000-505178	19980731
US 6444682	B1	20020903	US 2000-463501	20000418
US 2003060431	A1	20030327	US 2002-233993	20020903
US 6605611	B2	20030812		

PRIORITY APPLN. INFO.: GB 1997-16231 A 19970731  
WO 1998-GB2306 W 19980731  
US 2000-463501 A3 20000418

OTHER SOURCE(S): MARPAT 130:139583

IC ICM C07H019-00

ICS C07H021-00; C12Q001-68; G01N033-53

CC 33-9 (Carbohydrates)  
Section cross-reference(s): 7

ST DNA chain elongation prepn enzyme substrate; **nucleotide** analog  
prepn enzyme substrate

IT Enzymes, biological studies  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

IT DNA  
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

IT **Nucleotides**, preparation  
RL: BPR (Biological process); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

IT 9012-90-2, Dna polymerase 9027-67-2, Terminal deoxynucleotidyl transferase 37228-74-3, Exonuclease  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

IT 220003-54-3P 220003-69-0P **220003-72-5P** 220003-79-2P  
220003-81-6P 220003-91-8P 220003-95-2P 220003-97-4P 220003-99-6P  
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

IT 54-42-2, 5-Iodo-2'-deoxyuridine 1024-99-3 14719-21-2, N-Propargyl trifluoroacetamide 92557-80-7, 5-Carboxyfluorescein N-hydroxysuccinimide ester  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

IT 1956-30-5P 31356-86-2P 220003-49-6P 220003-50-9P 220003-52-1P  
220003-53-2P 220003-56-5P 220003-57-6P 220003-59-8P 220003-61-2P  
220003-63-4P 220003-65-6P 220003-67-8P 220003-75-8P 220003-77-0P  
220003-83-8P 220003-85-0P 220003-87-2P 220003-89-4P 220003-93-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

IT 220003-55-4P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

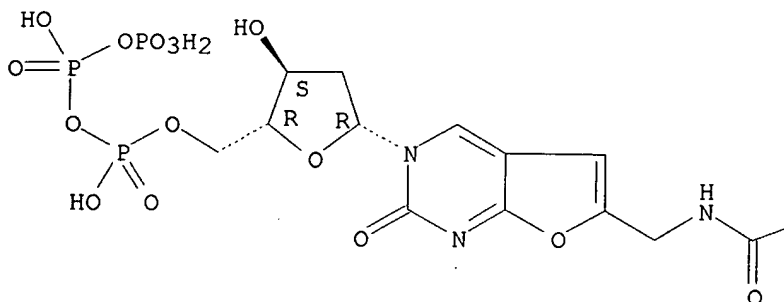
IT **220003-72-5P**  
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
(preparation of **nucleotide** analogs as enzyme substrates in the chain elongation of DNA)

RN 220003-72-5 HCAPLUS  
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthene]-5-carboxamide,  
N-[[3-[2-deoxy-5-O-[hydroxy[[hydroxy(phosphonooxy)phosphinyl]oxy]phosphiny  
l]-β-D-erythro-pentofuranosyl]-2,3-dihydro-2-oxofuro[2,3-d]pyrimidin-  
6-yl]methyl]-3',6'-dihydroxy-3-oxo- (9CI) (CA INDEX NAME)

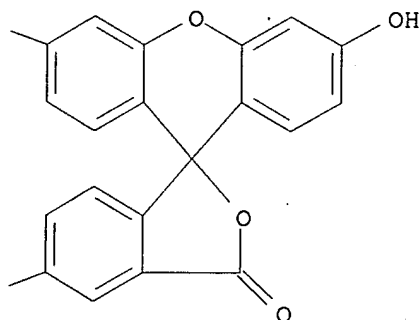
Absolute stereochemistry.

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HO—



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L39 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1998:789162 HCAPLUS  
DOCUMENT NUMBER: 130:33961  
TITLE: Single-step attachment of a label to target  
nucleotide molecules  
INVENTOR(S): Wolff, Jon A.; Hagstrom, James E.; Budker, Vladimir  
G.; Slattum, Paul M.  
PATENT ASSIGNEE(S): Mirus Corp., USA  
SOURCE: PCT Int. Appl., 50 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9852961	A1	19981126	WO 1998-US9961	19980518
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6262252	B1	20010717	US 1997-982485	19971202
EP 984977	A1	20000315	EP 1998-924777	19980518
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
US 2003125527	A1	20030703	US 2001-767794	20010123
US 6593465	B1	20030715		

PRIORITY APPLN. INFO.:

US 1997-46952P	P	19970519
US 1997-982485	A	19971202
WO 1998-US9961	W	19980518

OTHER SOURCE(S): MARPAT 130:33961

IC ICM C07H021-00

CC 3-1 (Biochemical Genetics)

Section cross-reference(s): 33

IT Nucleic acids

RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)

(labeled; single-step attachment of label to target **nucleotide** mols.)

IT Proteins, specific or class

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(labeling group; single-step attachment of label to target **nucleotide** mols.)

IT Chloramines

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(nitrogen mustards; single-step attachment of label to target **nucleotide** mols. by alkylating groups)

IT Fluorescent substances

Isotope indicators

(single-step attachment of label to target **nucleotide** mols.)

IT Haptens

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(single-step attachment of label to target **nucleotide** mols.)

IT Alkylation

(single-step attachment of label to target **nucleotide** mols. by alkylating groups)

IT Epoxides

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(single-step attachment of label to target **nucleotide** mols. by alkylating groups)

IT Heterocyclic compounds

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)

(sulfur; single-step attachment of label to target **nucleotide** mols. by alkylating groups)

IT 216659-54-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(digoxin labeling reagent; single-step attachment of label to target **nucleotide** mols.)

IT 94-31-5, 4-[(2-Chloroethyl)methylamino]benzaldehyde 108-18-9, Diisopropylamine 109-55-7 407-25-0, Trifluoroacetic acid anhydride 5185-75-1 18370-81-5, 3-Bromopropylamine 20830-75-5, Digoxin 35013-72-0 92557-81-8, 6-Carboxyfluorescein succinimidyl ester



117579-33-6, 5(6)-Carboxyrhodamine B succinimidyl ester 216659-61-9  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (single-step attachment of label to target **nucleotide** mols.)

IT 51834-66-3P 60873-58-7P 216659-47-1P 216659-49-3P 216659-51-7P  
 216659-53-9P 216659-56-2P 216659-58-4P 216659-60-8P  
**216659-63-1P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (single-step attachment of label to target **nucleotide** mols.)

IT 75-19-4D, Cyclopropane, derivs. 151-56-4D, Aziridine, derivs., uses  
 505-60-2D, Sulfur mustard, derivs.  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
 (single-step attachment of label to target **nucleotide** mols.  
 by alkylating groups)

IT **216659-63-1P**  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (single-step attachment of label to target **nucleotide** mols.)

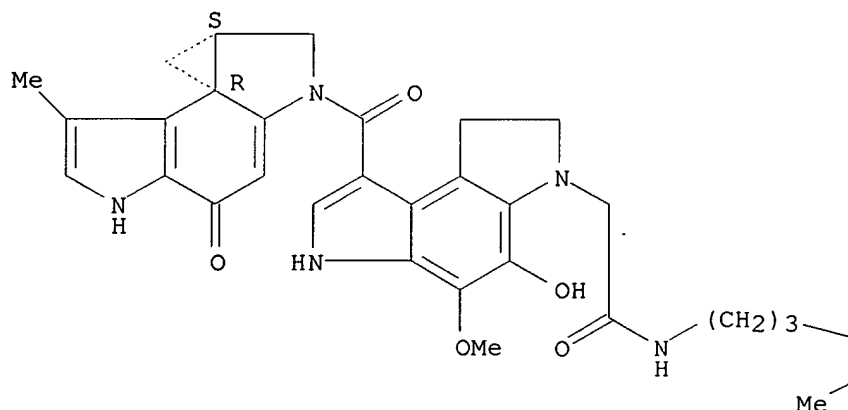
RN 216659-63-1 HCAPLUS  
 CN 1-Propanaminium, 3-[[3-carboxy-4-(1,2,4,5,9,10,12,13-  
 octahydrodipyrrolo[3,2,1-hi]pyrano[2,3-e:6,5-e']diindol-14-ium-7-  
 yl)benzoyl]amino]-N-[3-[[[1,6-dihydro-4-hydroxy-5-methoxy-8-[[[(7bR,8aS)-  
 4,5,8,8a-tetrahydro-7-methyl-4-oxocyclopropa[c]pyrrolo[3,2-e]indol-2(1H)-  
 yl]carbonyl]benzo[1,2-b:4,3-b']dipyrrol-3(2H)-yl]acetyl]amino]propyl]-N,N-  
 dimethyl-, salt with trifluoroacetic acid (1:2) (9CI) (CA INDEX NAME)

CM 1

CRN 216659-62-0  
 CMF C63 H65 N9 O9

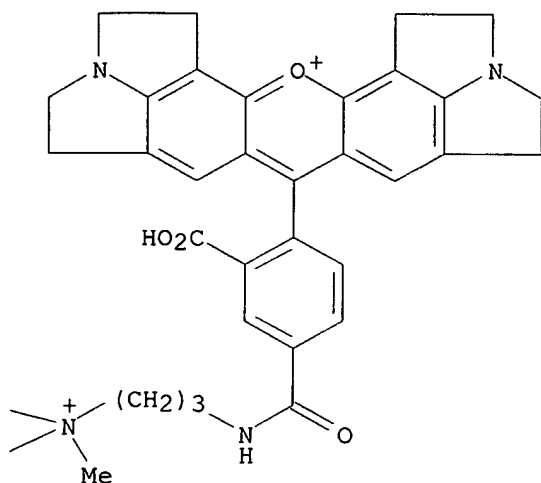
Absolute stereochemistry.

PAGE 1-A



Searched by P. Ruppel

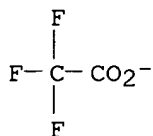
PAGE 1-B



CM 2

CRN 14477-72-6

CMF C2 F3 O2



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 16 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1998:427803 HCAPLUS  
DOCUMENT NUMBER: 129:95691  
TITLE: Preparation of substituted propargylethoxyamido nucleotides in study of DNA sequencing  
INVENTOR(S): Khan, Shaheer H.; Menchen, Steven M.; Rosenblum, Barnett B.  
PATENT ASSIGNEE(S): Perkin-Elmer Corp., USA  
SOURCE: U.S., 27 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

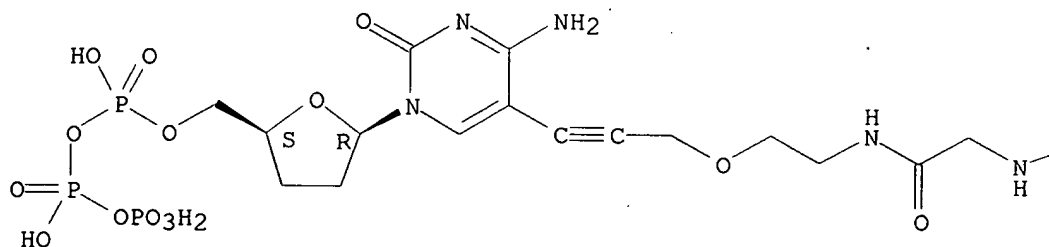
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5770716	A	19980623	US 1997-833855	19970410
CA 2257227	AA	19981015	CA 1998-2257227	19980323

Searched by P. Ruppel

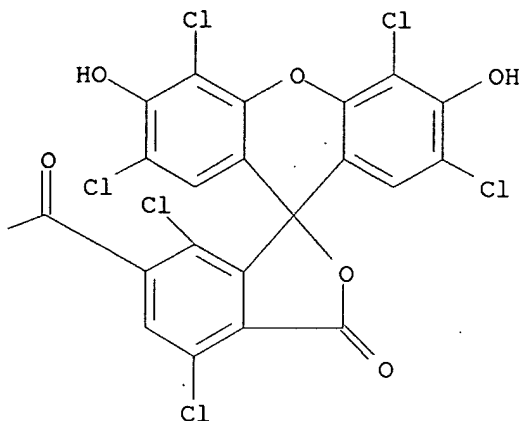
WO 9845310 A1 19981015 WO 1998-US5616 19980323  
W: AU, CA, JP  
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
AU 9868672 A1 19981030 AU 1998-68672 19980323  
AU 725288 B2 20001012  
EP 923597 A1 19990623 EP 1998-914275 19980323  
EP 923597 B1 20010926  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI  
JP 2000513016 T2 20001003 JP 1998-542803 19980323  
AT 206133 E 20011015 AT 1998-914275 19980323  
PRIORITY APPLN. INFO.: US 1997-833855 A 19970410  
WO 1998-US5616 W 19980323  
OTHER SOURCE(S): MARPAT 129:95691  
IC ICM C07H021-02  
ICS C12P019-34  
NCL 536023100  
CC 33-10 (Carbohydrates)  
Section cross-reference(s): 6, 41  
IT 204062-12-4P 209472-59-3P 209472-60-6P **209472-61-7P**  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of substituted propargylethoxyamido nucleotides in study of DNA  
sequencing)  
IT **209472-61-7P**  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(preparation of substituted propargylethoxyamido nucleotides in study of DNA  
sequencing)  
RN 209472-61-7 HCAPLUS  
CN Cytidine 5'-(tetrahydrogen triphosphate), 2',3'-dideoxy-5-[3-[2-  
[[[(2',4,4',5',7,7'-hexachloro-3',6'-dihydroxy-3-oxospiro[isobenzofuran-  
1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]acetyl]amino]ethoxy]-1-propynyl]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 17 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1996:534704 HCAPLUS

DOCUMENT NUMBER: 125:184948

TITLE: RNA Molecules That Specifically and Stoichiometrically Bind Aminoglycoside Antibiotics with High Affinities

AUTHOR(S): Wang, Yong; Killian, Jennifer; Hamasaki, Keita; Rando, Robert R.

CORPORATE SOURCE: Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, MA, 02115, USA

SOURCE: Biochemistry (1996), 35(38), 12338-12346

CODEN: BICHAW; ISSN: 0006-2960

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

CC 1-5 (Pharmacology)

IT **Nucleotides**, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)  
(oligo-, complexes with aminoglycosides; RNA mols. that specifically and stoichiometrically bind aminoglycoside antibiotics with high affinities)

IT **180633-27-6DP**, complexes with RNA **180633-28-7DP**,

complexes with RNA 180633-29-8DP, complexes with RNA

RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(RNA mols. that specifically and stoichiometrically bind aminoglycoside antibiotics with high affinities)

IT 180616-82-4P 180616-83-5P 180616-84-6P

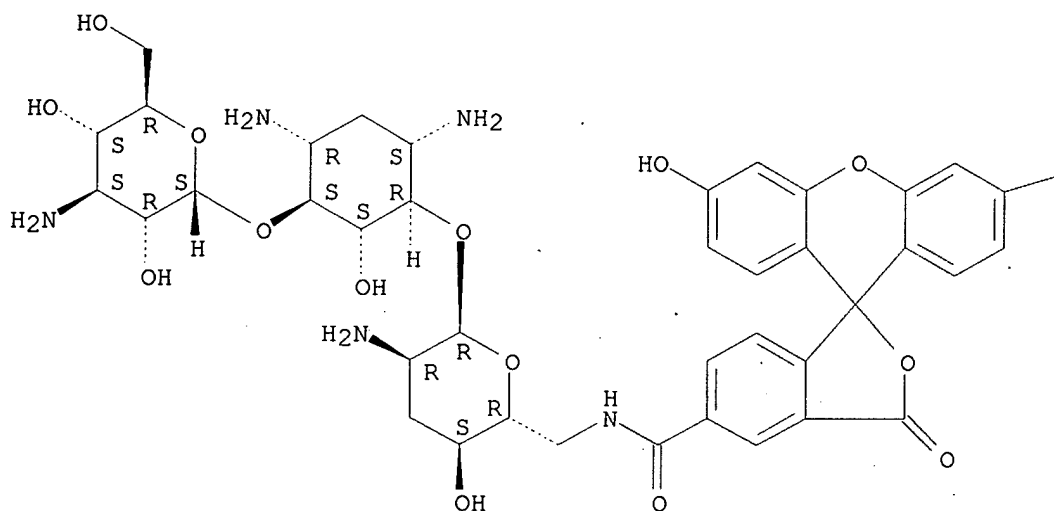
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)

(**nucleotide** sequence; RNA mols. that specifically and stoichiometrically bind aminoglycoside antibiotics with high affinities)

- IT 180616-81-3P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (nucleotide sequence; RNA mols. that specifically and stoichiometrically bind aminoglycoside antibiotics with high affinities)
- IT 180633-27-6DP, complexes with RNA 180633-28-7DP, complexes with RNA  
 RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)  
 (RNA mols. that specifically and stoichiometrically bind aminoglycoside antibiotics with high affinities)
- RN 180633-27-6 HCAPLUS  
 CN D-Streptamine, O-3-amino-3-deoxy- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 6)-O-[2-amino-2,3,6-trideoxy-6-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)carbonyl]amino]- $\alpha$ -D-ribo-hexopyranosyl-(1 $\rightarrow$ 4)]-2-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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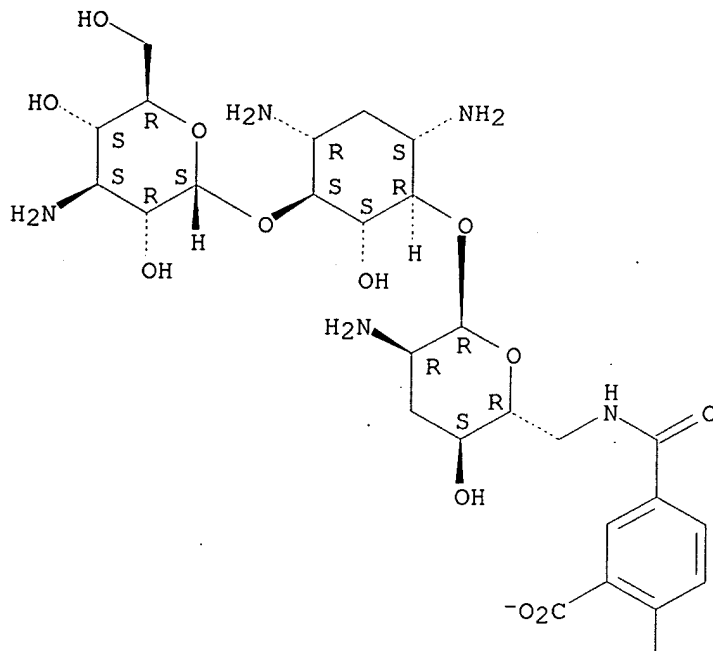
—OH

- RN 180633-28-7 HCAPLUS  
 CN D-Streptamine, O-2-amino-6-[[4-[3,6-bis(dimethylamino)xanthylium-9-yl]-3-carboxybenzoyl]amino]-2,3,6-trideoxy- $\alpha$ -D-ribo-hexopyranosyl-(1 $\rightarrow$ 4)-O-[3-amino-3-deoxy- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 6)]-2-

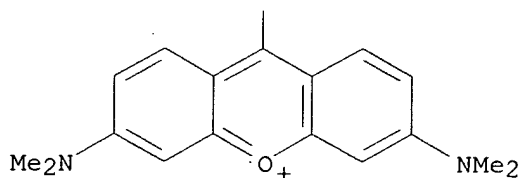
deoxy-, inner salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L39 ANSWER 18 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1994:318512 HCAPLUS

DOCUMENT NUMBER: 120:318512

TITLE: Conjugates of fluorescein and SAENTA  
(5'-S-(2-aminoethyl)-N6-(4-nitrobenzyl)-5'-thioadenosine): flow cytometry probes for the ES nucleoside transporter elements of the plasma membrane

AUTHOR(S): Buolamwini, J. K.; Craik, J. D.; Wiley, J. S.; Robins, M. J.; Gati, W. P.; Cass, C. E.; Paterson, A. R. P.  
CORPORATE SOURCE: Dep. Pharmacol., Univ. Alberta, Edmonton, AB, T6G 2H7, Can.

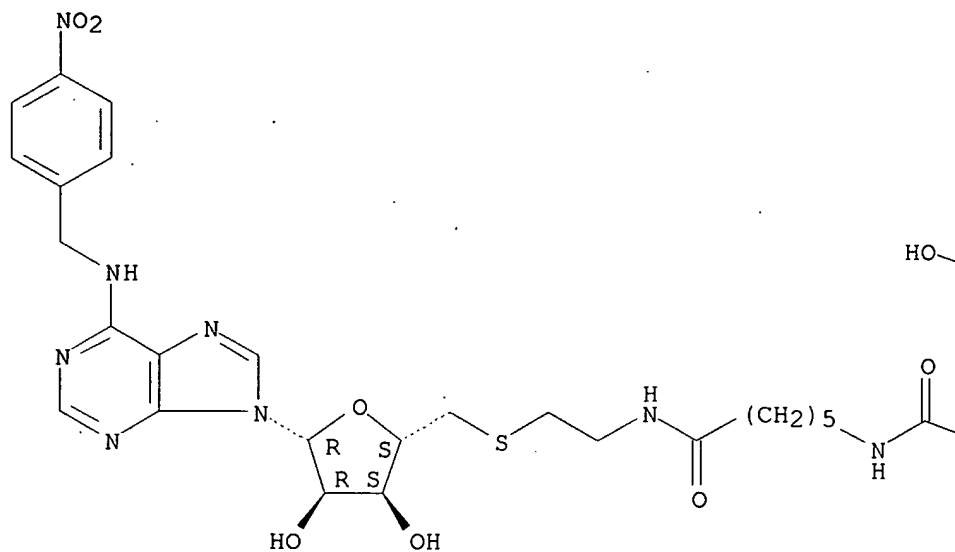
SOURCE: Nucleosides & Nucleotides (1994), 13(1-3), 737-51  
CODEN: NUNUD5; ISSN: 0732-8311

Searched by P. Ruppel

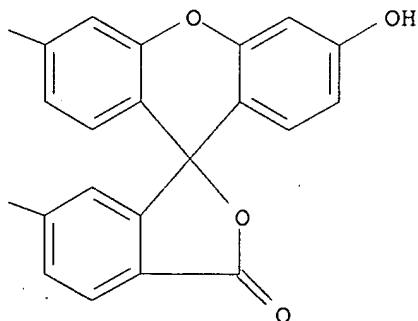
DOCUMENT TYPE: Journal  
LANGUAGE: English  
CC 9-3 (Biochemical Methods)  
Section cross-reference(s): 6  
ST fluorescein SAENTA stain es **nucleoside** transporter  
IT Stains, biological  
(SAENTA fluorescein derivs. as, for es **nucleoside** transporter)  
IT Leukemia  
(cell line L1210, es **nucleoside** transporter of, SAENTA fluorescein derivs. staining of)  
IT Cell membrane  
(es **nucleoside** transporter of, SAENTA fluorescein derivs. staining of)  
IT Staining, biological  
(of es **nucleoside** transporter using SAENTA fluorescein derivs.)  
IT Cytometry  
(flow, of es **nucleoside** transporter using SAENTA fluorescein derivs.)  
IT Proteins, specific or class  
RL: ANST (Analytical study)  
(**nucleoside**-transporting, es, staining of, of plasma membrane using SAENTA fluorescein derivs.)  
IT 146270-65-7P 146270-67-9P 147395-08-2P 155348-52-0P  
**155348-53-1P** 155348-54-2P 155348-55-3P  
RL: PREP (Preparation)  
(preparation, and es **nucleoside** transporter staining by)  
IT **155348-53-1P**  
RL: PREP (Preparation)  
(preparation, and es **nucleoside** transporter staining by)  
RN 155348-53-1 HCAPLUS  
CN Adenosine, 5'-S-[2-[[6-[[[3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-oxohexyl]amino]ethyl]-N-[(4-nitrophenyl)methyl]-5'-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L39 ANSWER 19 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1993:665984 HCAPLUS  
DOCUMENT NUMBER: 119:265984  
TITLE: Synthesis of fluorescence-labeled nucleic acids  
INVENTOR(S): Harding, John D.; Gebeyehu, Gulilat; Laskin, Roger;  
Haces, Alberto  
PATENT ASSIGNEE(S): Life Technologies, Inc., USA



SOURCE: PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

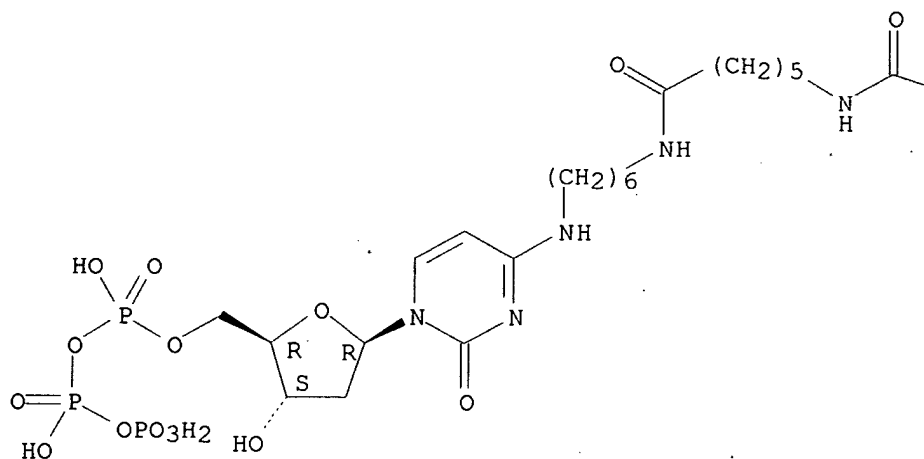
PATENT INFORMATION:

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	WO 9319206	A1	19930930	WO 1993-US2422	19930317
	W: CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			US 1992-852705	19920317	
IC	ICM C12Q001-68				
	ICS C12P019-34; C07H021-04				
CC	9-14 (Biochemical Methods)				
	Section cross-reference(s): 3, 33				
IT	Fluorescent substances				
	(conjugates, with <b>nucleotides</b> , for enzymic synthesis of fluorescence-labeled nucleic acids)				
IT	Deoxyribonucleic acid formation				
	Transcription, genetic				
	(using fluorescence-labeled <b>nucleotides</b> )				
IT	<b>Nucleotides</b> , compounds				
	RL: ANST (Analytical study)				
	(conjugates, with fluorophores, for enzymic synthesis of fluorescence-labeled nucleic acids)				
IT	<b>Nucleotides</b> , compounds				
	RL: ANST (Analytical study)				
	(deoxyribo-, conjugates with fluorophores, for enzymic synthesis of fluorescence-labeled nucleic acids)				
IT	151345-12-9	151345-13-0	151345-14-1	151345-15-2	
	151345-16-3	151345-17-4	151345-20-9		
	151345-21-0	151345-30-1	151345-31-2	151366-39-1	
	RL: ANST (Analytical study)				
	(in fluorescence-labeled DNA enzymic synthesis)				
IT	151345-22-1	151345-23-2	151345-24-3	151345-25-4	
	151345-26-5	151345-27-6	151345-28-7	151345-29-8	
	151345-32-3	151345-33-4			
	RL: ANST (Analytical study)				
	(in fluorescence-labeled RNA enzymic synthesis)				
IT	151345-15-2	151345-16-3	151345-17-4		
	151345-21-0	151345-31-2			
	RL: ANST (Analytical study)				
	(in fluorescence-labeled DNA enzymic synthesis)				
RN	151345-15-2 HCAPLUS				
CN	Cytidine 5'-(tetrahydrogen triphosphate), 2'-deoxy-N-[6-[[6-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-oxohexyl]amino]hexyl]- (9CI) (CA INDEX NAME)				

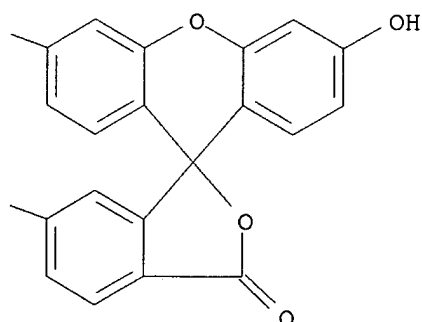
Absolute stereochemistry.

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HO—



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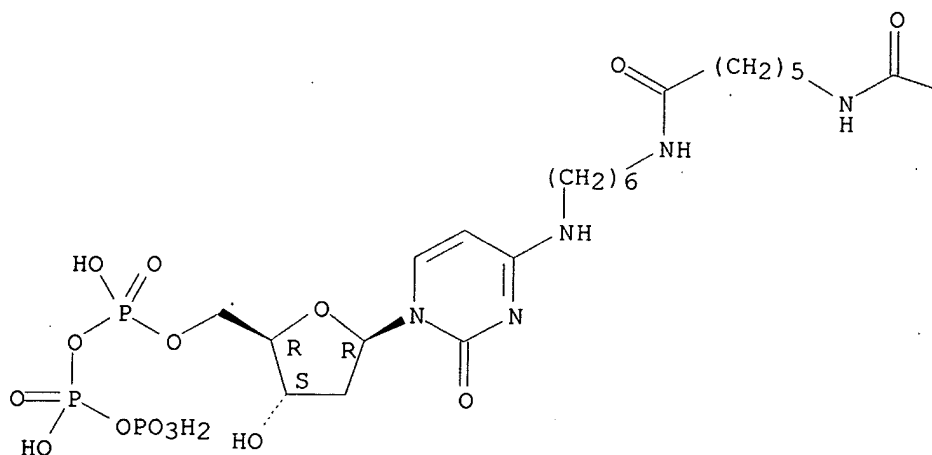


RN 151345-16-3 HCAPLUS

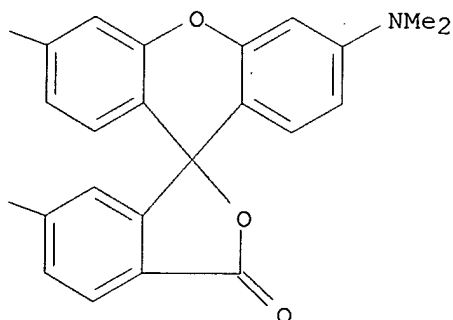
CN Cytidine 5'-(tetrahydrogen triphosphate), N-[6-[[6-[[[3',6'-bis(dimethylamino)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl]carbonyl]amino]-1-oxohexyl]amino]hexyl]-2'-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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Me<sub>2</sub>N

PAGE 1-B



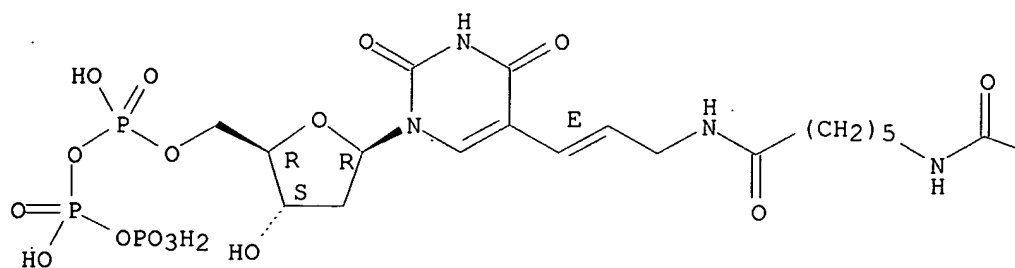
RN 151345-17-4 HCAPLUS

CN Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-5-[3-[[6-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-oxohexyl]amino]-1-propenyl]-, (E)- (9CI) (CA INDEX NAME)

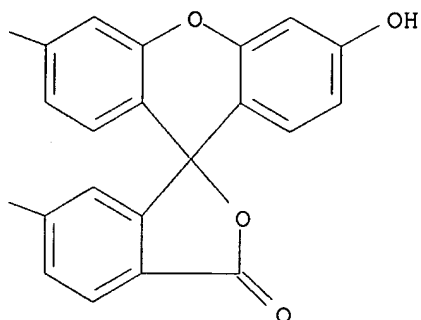
Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A

HO—



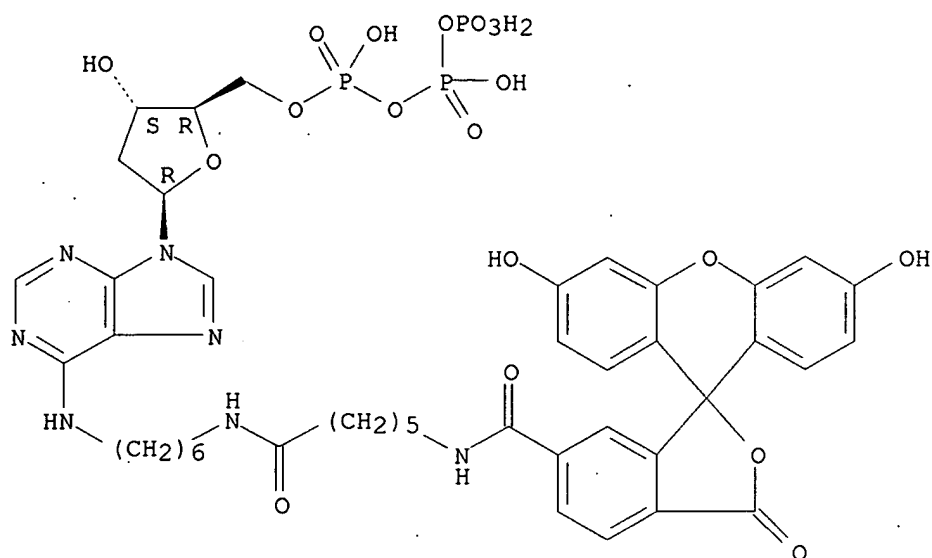
PAGE 1-B



RN 151345-21-0 HCAPLUS

CN Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy-N-[6-[[6-[[{(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-oxohexyl]amino]hexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



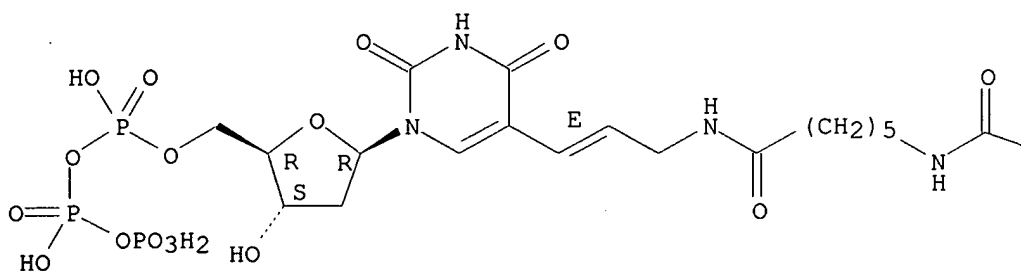
RN 151345-31-2 HCAPLUS

CN Uridine 5'-(tetrahydrogen triphosphate), 5-[3-[[6-[[[3',6'-bis(dimethylamino)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl]carbonyl]amino]-1-oxohexyl]amino]-1-propenyl]-2'-deoxy-, (E)- (9CI)  
(CA INDEX NAME)

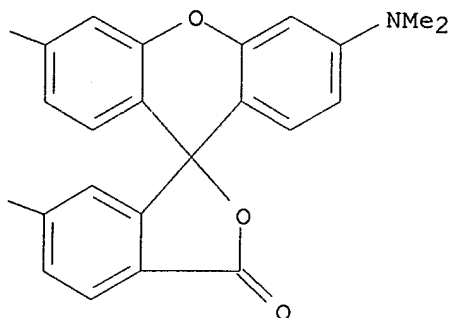
Absolute stereochemistry.  
Double bond geometry as shown.

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Me<sub>2</sub>N



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IT 151345-22-1 151345-25-4 151345-26-5  
151345-29-8

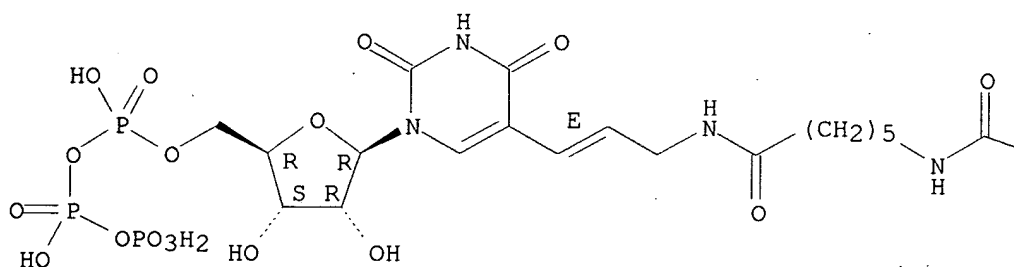
RL: ANST (Analytical study)  
(in fluorescence-labeled RNA enzymic synthesis)

RN 151345-22-1 HCAPLUS

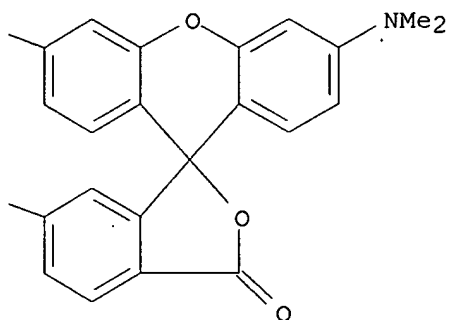
CN Uridine 5'-(tetrahydrogen triphosphate), 5-[3-[[6-[[[3',6'-bis(dimethylamino)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl]carbonyl]amino]-1-oxohexyl]amino]-1-propenyl]-, (E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown:

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Me<sub>2</sub>N

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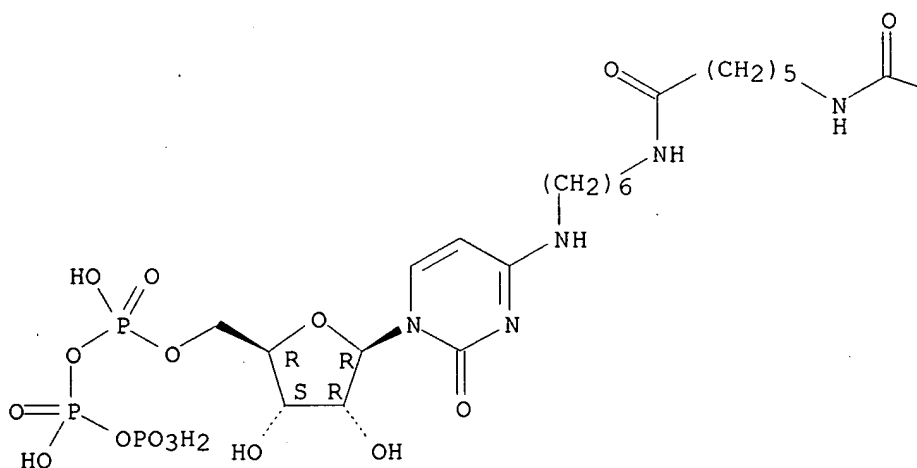


RN 151345-25-4 HCAPLUS

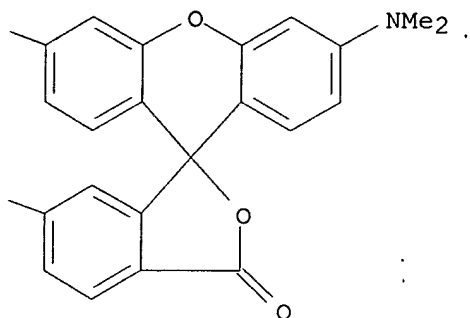
CN Cytidine 5'-(tetrahydrogen triphosphate), N-[6-[[6-[[[3',6'-bis(dimethylamino)-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl]carbonyl]amino]-1-oxohexyl]amino]hexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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Me<sub>2</sub>N

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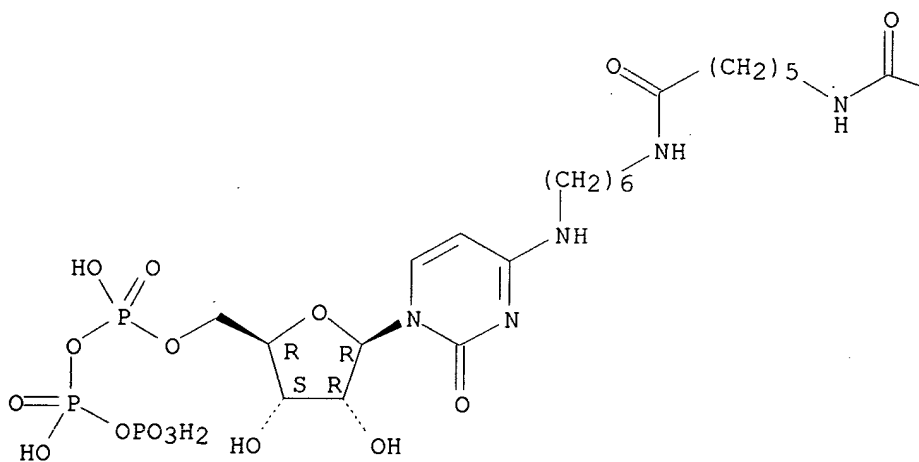
RN 151345-26-5 HCAPLUS

CN Cytidine 5'-(tetrahydrogen triphosphate), N-[6-[[6-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-oxohexyl]amino]hexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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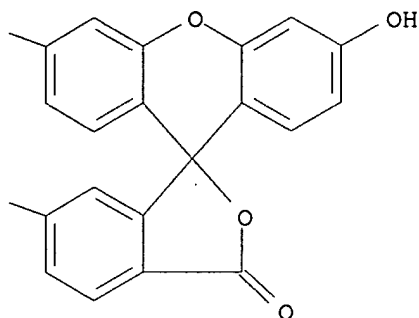
HO—



Searched by P. Ruppel



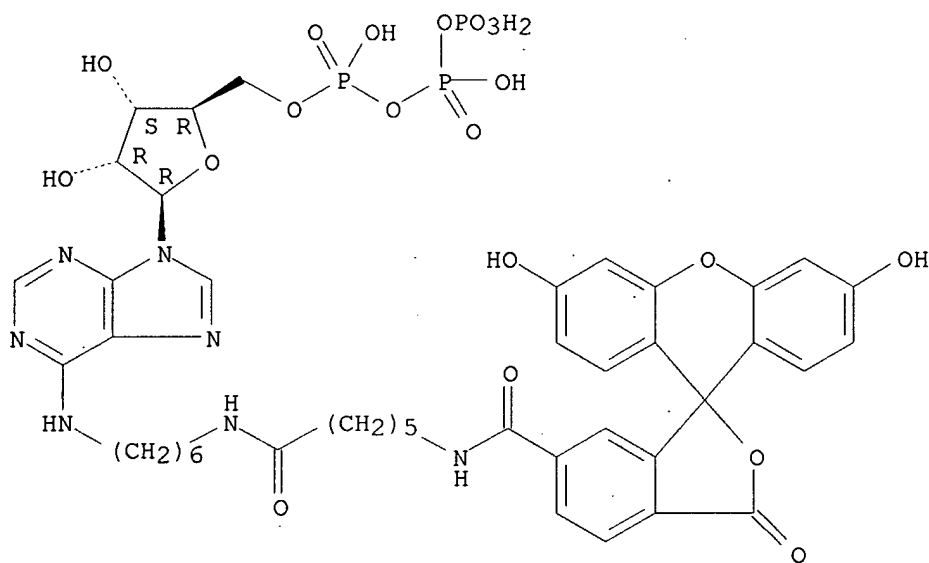
PAGE 1-B



RN 151345-29-8 HCAPLUS

CN Adenosine 5'-(tetrahydrogen triphosphate), N-[6'-[[6-[[[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-6-yl)carbonyl]amino]-1-oxohexyl]amino]hexyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L39 ANSWER 20 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1992:525473 HCAPLUS

DOCUMENT NUMBER: 117:125473

TITLE: DNA sequencing with dye-labeled terminators and T7 DNA polymerase: effect of dyes and dNTPs on incorporation of dye-terminators and probability of termination fragments

AUTHOR(S): Lee, Linda G.; Connell, Charles R.; Woo, Sam L.; Cheng, Richard D.; McArdle, Bernard F.; Fuller, Carl W.; Halloran, Nicolette D.; Wilson, Richard K.

CORPORATE SOURCE: Appl. Biosyst. Inc., Foster City, CA, 94404, USA  
SOURCE: Nucleic Acids Research (1992), 20(10), 2471-83

CODEN: NARHAD; ISSN: 0305-1048

DOCUMENT TYPE:

Journal

LANGUAGE:

English

CC 3-1 (Biochemical Genetics)

IT 114748-56-0D, fluorescein dye conjugate 114748-59-3D, fluorescein dye conjugate 114748-61-7D, fluorescein dye conjugate 114748-69-5D, fluorescein dye conjugate 142975-54-0 142975-55-1 142975-56-2 142975-57-3 142975-58-4 142975-59-5 142975-60-8 142975-61-9 142975-62-0 142975-63-1 142975-64-2 142975-65-3 142975-66-4 142975-67-5 142975-68-6 142975-69-7 142975-70-0 142975-71-1 142975-72-2 142975-73-3 142975-74-4 142975-75-5 142975-76-6 142975-77-7 **142975-78-8** 143125-98-8 143125-99-9 143148-01-0

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (use of, as dye-terminator, in DNA sequence determination with T7 DNA polymerase)

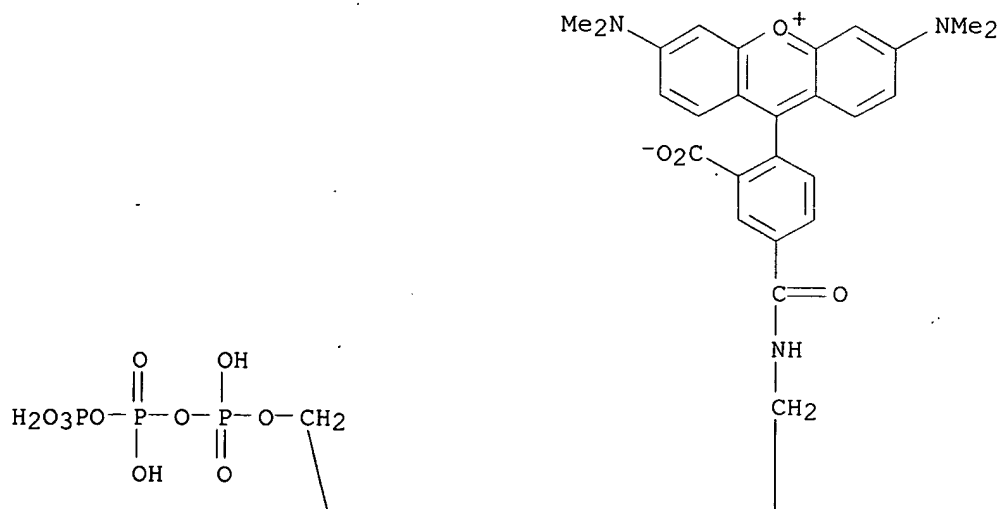
IT **142975-78-8**

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (use of, as dye-terminator, in DNA sequence determination with T7 DNA polymerase)

RN 142975-78-8 HCAPLUS

CN Xanthylum, 9-[4-[[[5-[[[3-[2-amino-4,7-dihydro-4-oxo-7-[tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-1H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propynyl]amino]carbonyl]-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl]methyl]amino]carbonyl]-2-carboxyphenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

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